

The MODERN HOSPITAL

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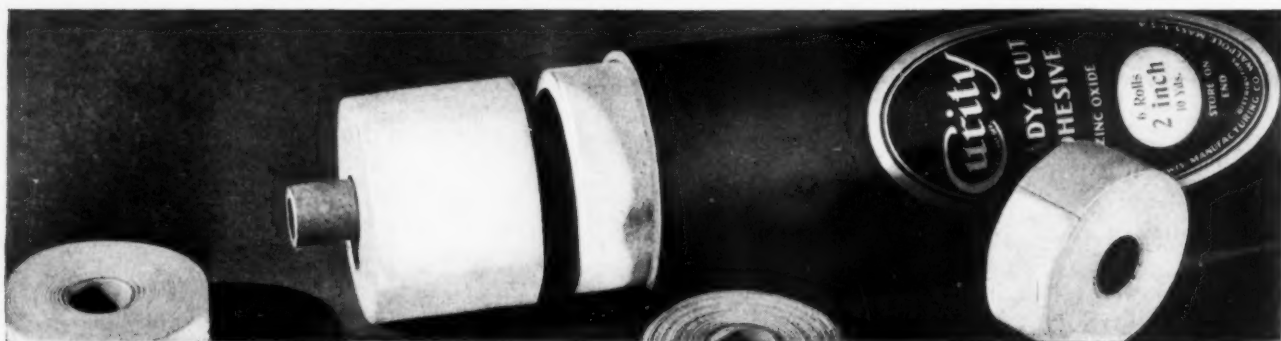
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THE MODERN HOSPITAL

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Vol. XXXIV

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No. 6

Faulty Mental Attitudes in Patients and How to Correct Them

By S. S. GOLDWATER, M.D.
Hospital Consultant, New York City

THE modern hospital acknowledges a twofold duty toward its patients. The essential treatment of the sick, a primary hospital function, requires shelter, medical service and nursing service. If the hospital is built to withstand the weather, if diagnosis is sound and treatment adequate, if nursing is skillfully performed, the principal tasks of the hospital, which are related to the patient's bodily needs, may be regarded as satisfactorily accomplished, for thus life is saved and bodily functions are preserved or renewed.

But the ideas of modern hospital administration go further. In the details of hospital planning and in a multitude of administrative arrangements one finds evidence that hospitals are as much concerned about the patient's mental comfort as about his physical needs. The best hospitals to-day assume a duty toward their patients that is more inclusive and more humane than a strict interpretation of the term "medical service" requires, for the patient's mental states—anxiety, fear, ennui, worry, depression, shame, loneliness, irritation—are objects of the hospital's solicitude, apart from physical conditions and the pain and discomfort to which they give rise. Just what this solicitude implies may be seen by following an imaginary patient to the hospital, observing the manner in which he is received and noting his mental reactions to a new and trying environment.

The sick person who is forced to seek hospital aid is not ordinarily in a happy frame of mind.

He knows that an effort will be made by the hospital to relieve his suffering and to restore his health, but he is about to entrust himself to strangers and he looks eagerly, but not too hopefully at first, for signs of personal sympathy. In advance of any contact between the patient and the medical staff, the hospital begins to consider the state of the patient's mind. It tries to make a pleasant first impression in order to win the patient's confidence and allay his anxiety. The character of the room in which he is received registers either favorably or unfavorably in the mind of a sensitive and observant patient; the tone of the receiving clerk may frighten him, soothe him or leave him in a state of uncertainty about the warmth of his welcome and the sincerity of the hospital's concern for his welfare. Already at the moment of the patient's arrival the hospital administration is faced with duties arising out of the patient's mental reactions.

Patient's History Taken in Private Room

In the carefully planned and humanely conducted hospital the initial administrative procedure, that is, the recording of the patient's social history, is performed quietly in a private room or cubicle, and in a friendly, not an inquisitorial, manner. If the patient's physical or mental condition makes it advisable to dispense at the moment with the formality of social history taking, the observant hospital official will perceive this and will act accordingly. What a contrast at this stage between sincere personal

consideration and the rugged, almost brutal impersonality of the clinic of older days!

An informed hospital administration realizes that the personnel of the admitting station must be sufficient in number to ensure prompt attention to each patient as he arrives. Nothing can be more distressing to a patient, wretched in body and in mind, than to be told that he must await his turn. One way in which hospitals seek to avoid creating a bad impression is to assign to the admitting ward a hostess or social worker who, having no medical or nursing duties to perform, is free to devote herself entirely to the personal needs of new arrivals and see that they receive courteous attention.

How Social Worker May Serve

It often happens that a newly admitted patient is thinking not so much of his own physical condition as of his deserted home, his neglected dependents. Obviously a busy surgeon or nurse has no time to enter into such matters, but the hospital administration, through its social service workers, seeks to uncover needs of this sort and to deal with them sympathetically. The effect of such a service upon the patient's mind can be easily pictured.

I might continue with an imaginary patient in this fashion to the end of his hospital stay, noting experiences that are typical and dwelling particularly on those that cause unsatisfactory mental reactions. But the story would be so long that I propose instead to present a list of mental states that are the natural and common results of hospital experience and environment, to assign to each its predisposing cause or causes and thus to expose to view conditions with which it is the duty of hospital administration to deal logically and systematically.

Causes for Bad Mental State

From the presentation that follows, all clinical procedures, as such, are purposely omitted. For example, the use of a sedative might be regarded as psychological treatment when resorted to for the purpose of alleviating the mental condition of a patient who has been subjected to hospital annoyances for which faulty management is responsible. But the use of a drug is clinical treatment and is not a function of hospital administration, to which the present article is confined.

The principal psychological states with which the hospital administrator is concerned are (1) fear, anxiety, distrust, (2) worry, (3) ennui and loneliness, (4) depression, (5) shame, (6) disgust and (7) irritation. There are predisposing factors that contribute to the creation of each of

these undesirable states of mind, and from cause to cure—or better still, to prevention—is a logical step.

FEAR, ANXIETY, DISTRUST

<i>Predisposing Causes</i>	<i>Administrative Procedure</i>
Strange and harsh surroundings.	Pleasantly furnished rooms, suggesting hospitality.
Indifference.	Friendly attitude of attendants; persistent and tactful encouragement by staff nurses, social workers and voluntary aids.
Neglect.	Frequency and periodicity of staff visits or rounds; adequate number of resident physicians; prompt response to emergency calls; adequate supply of nurses and orderlies, both day and night.
Inability to summon aid.	Call mechanism to be placed within easy reach of bed patients; evidence plain to the patient's eye that signal system is working successfully; nurses' station in sight of ward patients rather than in a remote location; extension of call system to all sections of the building used by patients, and, at the other end, to all places where nurses are likely to be occupied outside of the ward proper.
Alarming sights and sounds.	Removal of moribund and excited patients to separate rooms; emergency treatment rooms; sound deadening devices; rule forbidding discussion of bad prognosis in presence of patients; avoidance of unnecessary discussion of dangerous operations, or of painful therapeutic procedures; history and diagnosis charts to be inaccessible to patients; pre-operative patients to be protected from sight of operating rooms in use, and of postoperative patients not fully recovered from anesthesia (recovery rooms); display of terrifying instruments and apparatus to be avoided.

WORRY

Predisposing Causes

Unsettled, unsatisfactory or unknown home or social conditions, with which the patient is powerless to deal.

Administrative Procedure

Opportunities for contact with relatives and friends (visiting hours not so severely restricted as to preclude desirable visits); organized social service, volunteer aids (friendly visitors).

ENNUI AND LONELINESS

Predisposing Causes

Monotony of surroundings.

Administrative Procedure

Tasteful interior decoration; view of sky and landscape from patient's bed; utilization of flowers and plants (window boxes, flower pots, cut flowers from hospital's garden or gifts from hospital's friends and workers); change of bed location from ward to roof, solarium, balcony or garden; day rooms for convalescents; removal to country branch hospitals or convalescent homes.

Lack of mental and physical occupation.

Visits of volunteer aids; circulating library; daily newspapers; occupational therapy; radio; day rooms and auditoriums for convalescents.

Lack of accustomed pleasures.

Games; motion pictures; permission to smoke in specified places.

Separation from family and friends.

Suitable visiting hours; facilities for letter writing (writing material, stamps, personal service of aids); prompt distribution of patient's mail; accessible telephones.

Lack of company.

Avoidance of strict isolation of patients who are sociable.

DEPRESSION

Predisposing Causes

Uncertain future outlook.

Administrative Procedure

Occupational therapy; enlistment of cooperation of employment agencies by social service department; assistance in obtaining "compensation" allowances to which patients are legally entitled.

Long duration of illness.

Occupation, change of surroundings, friendly encouragement; relaxation of restrictive hospital rules regarding visiting; permission to leave the hospital from time to time; ambulatory treatment in place of hospital treatment; advice of special consultants (to hasten recovery); intensive feeding; intensive nursing.

Lack of religious consolation.

Visits of spiritual advisers.

SHAME

Predisposing Causes

Lack of privacy (physical exposure).

Administrative Procedure

Separation rooms; cubicles and curtains in wards; examining and treatment rooms; proper demeanor of nurses, interns, staff, medical students (due respect for patient's privacy).

Disclosure of poverty, disclosure of physical defects and "shameful" diseases.

Sympathetic and discreet attitude of attendants.

DISGUST

Predisposing Causes

Exposure to evil sights and smells.

Administrative Procedure

Careful use of screens and other means of protection; adequate ventilation; refined nursing technique; control of clinical procedures.

Careless preparation and presentation of food, monotonous menus.

Proper dietary service; dining rooms for convalescents; frequent change of menus.

IRRITATION

Predisposing Causes

Annoying sounds from within and without the hospital.

Administrative Procedure

Proper choice of site; careful planning for sound control; isolation of children's and infants' wards, of separation rooms for delirious patients and of labor and delivery rooms.

Disagreeable neighbors.	Congenial grouping of patients; separation rooms for troublesome individuals.
Delayed service.	Proper regimentation of food and other services.
Favoritism.	Avoidance of all signs of partiality in treatment of patients.

The order of the foregoing presentation seems to suggest that the hospital administrator should keep a watchful eye on his patients, note the appearance of characteristic disagreeable mental states, and then proceed to apply proper treatment. Such a procedure would resemble the symptomatic treatment of disease by the clinician. In reality the method of sound hospital administration bears a closer resemblance to the practice of preventive medicine. The competent hospital planner plans a hospital building so carefully that many causes of irritation are forestalled, while the experienced hospital administrator puts his institution in such perfect order that his guests are seldom annoyed by faulty administrative methods. Wise hospital administration, in other words, does not seek to soothe a patient who has been thrown by an improper environment into a wretched, unhappy and perhaps resentful state of mind, a condition that tends to lessen the efficacy of normal therapeutic measures, but from the moment of its first contact with the patient it sets about winning his confidence, contributing to his comfort and supplying interests to which his mind reacts in so favorable a manner that he becomes the willing, optimistic and helpful ally of doctor and nurse, and not their peevish antagonist or unwilling victim.

Let the Patient Bear Testimony

At a number of points I have touched upon the danger of neglect (whether real or imaginary), which is undoubtedly responsible for a large part of the mental distress of hospital patients. But I am quite willing to concede that undesirable mental states may be created by going to the opposite extreme. On this point I quote Dr. William J. Mayo, who, in a recent address before the American College of Surgeons, said, "My own experience has been that the patient in a well planned ward, giving a moderate degree of privacy, on the whole will make a quicker recovery than in a private room with attentive nurses who unobtrusively, in caring for the physical needs and increasing the happiness of the patient, may suggest a mental state in which the disease condition is exaggerated sympathetically."

I know of no better method of acquiring an effective technique for the positive psychological

treatment of hospital patients by administrative methods than to obtain from the discharged patients of any hospital over a period of years a frank statement of the things that have either pleased or annoyed them during their hospital sojourn. Such testimony, to be sure, cannot always be taken at its face value, but must be interpreted in the light of an intimate knowledge of hospital circumstances and of hospital personnel, of relevant social and economic conditions and of the principles of human psychology.

Creating a Right Mental Attitude

An important word remains to be spoken about the mental preparation of patients in advance of their actual admission to the hospital. The confidence of the patient must, of course, be won and held chiefly by means of actual hospital procedures—by suitable regulation of internal hospital conditions which inevitably affect the patient's mental attitude. But if the patient can be made to approach the hospital with a preestablished belief in its efficiency and good will, the tasks that follow are greatly facilitated.

Why is it that when there are two hospitals in the same neighborhood, one usually occupies a higher place in public esteem than the other? Why is it that the sick often avoid some hospitals as if they were pestilential? It is the discharged patient who to a great extent makes the reputation of a hospital. A story of hospital neglect or of harsh treatment, told by one who claims to have been a victim of such neglect or ill treatment, is likely to be remembered for many years and a more favorable report also makes a lasting impression of a more favorable kind.

But the influence of the discharged patient has natural limitations, and as not only the friends of former patients but members of the community are possible future hospital patients, the worthy hospital cannot afford to rely upon the good will of satisfied patients as an exclusive means of creating confidence in its organization and its work. The hospital must resort to systematic publicity in order to create a widespread prepossession in its favor. I would therefore say to the hospital, first, "Strive to be efficient; resolve to be humane," and second, "Communicate to the public, in a dignified and ethical manner, the story of your ideals, your resources, your methods, your results."

The reader of to-day is the patient of to-morrow, and if the mind of the public is properly "set," patients will approach the hospital suffused with confidence, and will not readily become the prey of exaggerated fears, of unwarranted distrust or of baseless mental anguish.

How Rainbow Hospital Is Helping Children Back to Health

By MAXWELL HARBIN, M.D., F.A.C.S.

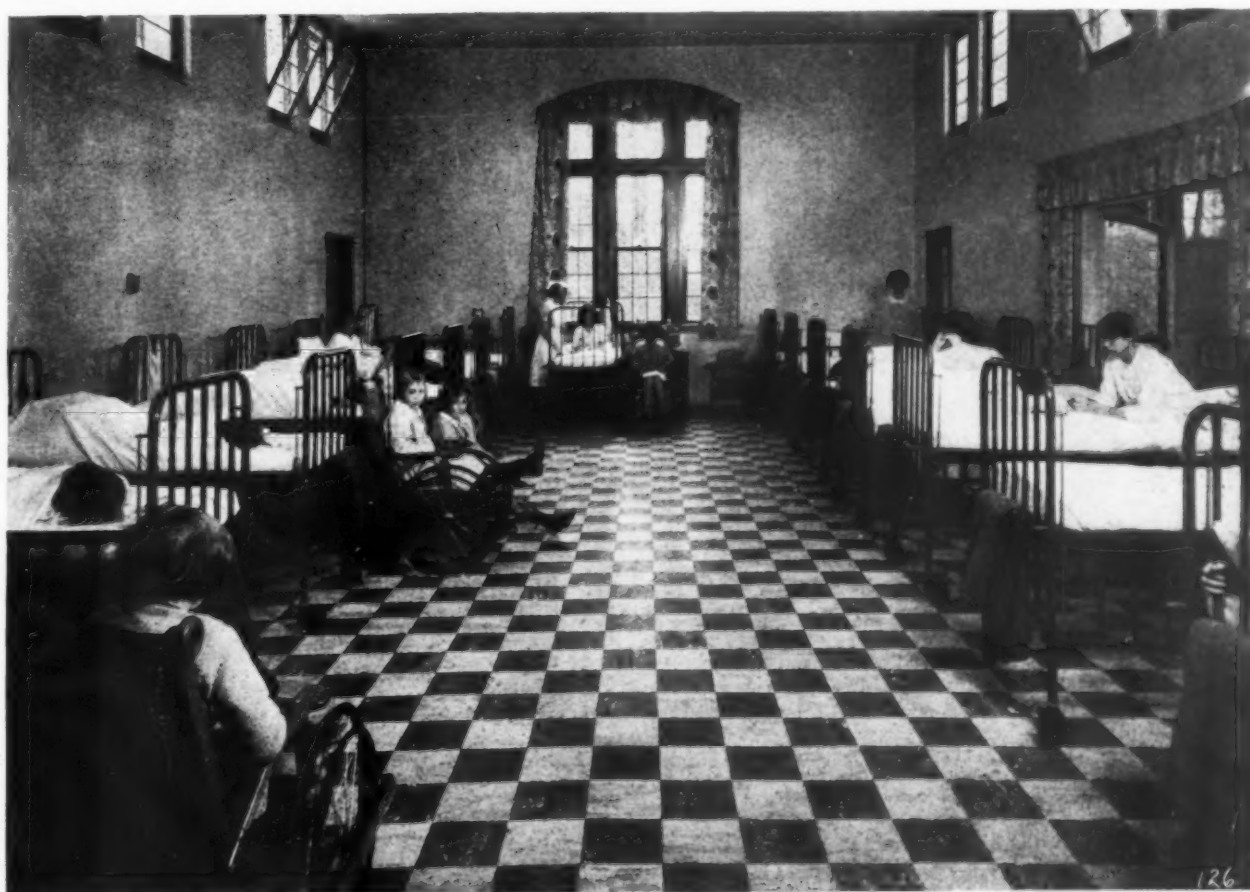
Orthopedic Surgeon to the Rainbow Hospital, South Euclid, Ohio

THE convalescent hospital, like other types of institutions, has undergone a change in recent years in an endeavor to improve the care of patients. The modern methods of treatment are such that they cannot well be developed in the old structures.

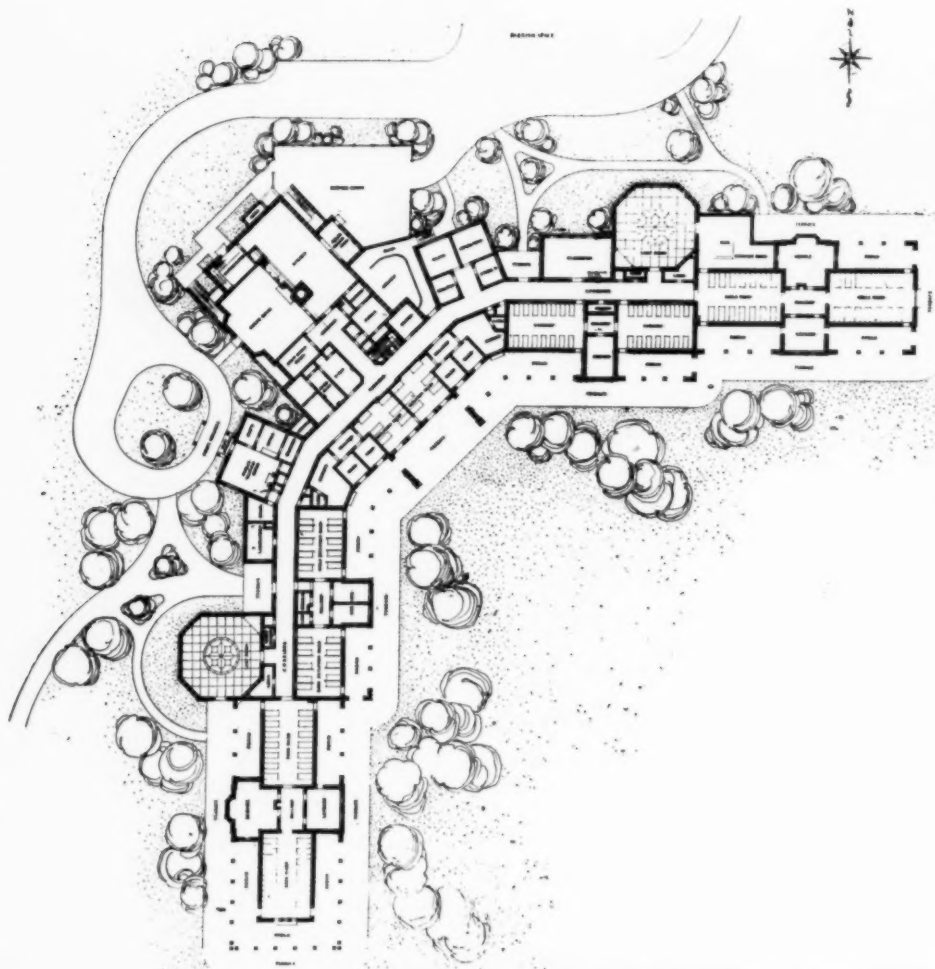
Hospitals, convalescent and acute, are much like other structures of our time. Relatively early they become obsolete and fail to fit into the modern scheme of things. At the outset it should be said that a convalescent hospital differs from the so-called acute hospital, this variation depending upon whether the convalescent hospital takes only ambulatory cases or includes bed cases.

The Rainbow Hospital, South Euclid, Ohio, is a convalescent hospital that concerns itself largely with the care of orthopedic patients, although it takes pediatric patients as well. About one-half of the patients are bed cases. The hospital has an interesting history.

Rainbow Cottage was organized on Thanksgiving Day, 1890, by a group of young women of Cleveland and was opened as a summer home for convalescent children the following Spring. It was incorporated in 1891. In 1913 it was incorporated as the Rainbow Hospital for Crippled and Convalescent Children. In 1924, it became affiliated with the Western Reserve University



Gay cretonnes and plenty of sunlight are important aids in the convalescence of these young patients in the girls' ward.



Courtesy Franz C. Warner and W. R. McCornack, Architects, Cleveland.

The front elevation of the hospital faces the southeast.

medical group, Cleveland, and its medical staff is now appointed on the recommendation of the medical faculty of Western Reserve University. It admits free, part-pay, and full-pay patients from all the hospitals of the city. It also maintains a graded school for children, supervised by the board of education, with two full-time teachers. There is a separate building for ambulatory cases. Bedside instruction is given, also. A department of occupational training has

been organized in which children are given instruction in all kinds of handicrafts.

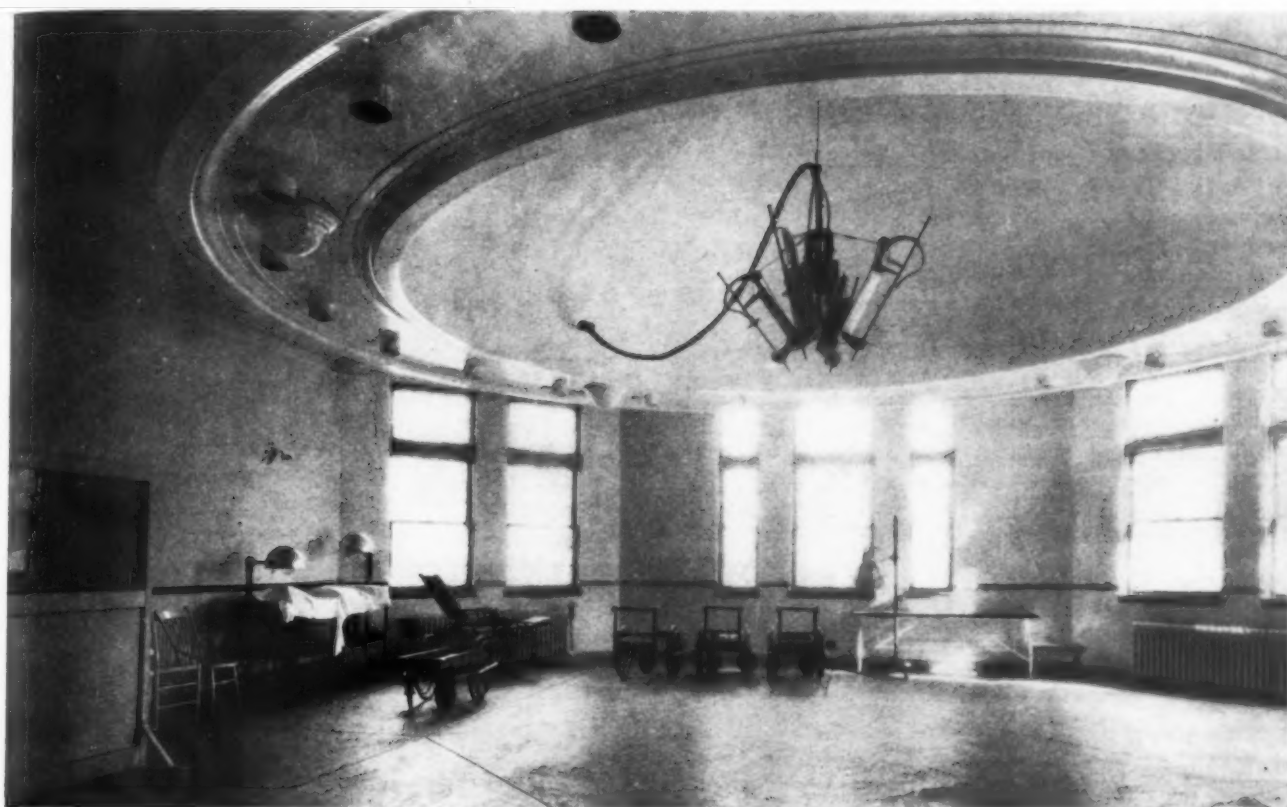
The urge for more efficient care of patients prompted the building of an entirely new hospital which was finished and occupied in October, 1928. A feature of this building is that all the patients are housed on the first floor. The building itself is so placed that high ground shelters the building from the prevailing north and northwesterly winds. It has a total capacity of 125 beds. Porches, both screened and roofed, as well as those that are unscreened and open, almost surround the entire hospital. The indoor floor space virtually equals the out-of-door space. In fact it might be said the hospital is built within a porch.

The admitting office is in the middle of the building with an examining room and clinical laboratory adjoining. Across the corridor is a detention unit of twenty beds. Cubicles are arranged, with a ten-bed room upon either side of a chart room. There are utility units for each side. The patients remain in detention for two weeks, after which they are transferred.

The main dining room, the kitchen and living quarters of the house staff, together with the



All the patients of Rainbow Hospital are housed on the first floor.



x-ray and photographic rooms, are in the central unit and occupy two floors.

Ages of the patients vary from one and a half to twelve years. Children above the nursery age are segregated according to sex. The boys are placed in one end of the building in two large sixteen-bed wards with full monitor type roof. Between the wards is a chart room and upon one side is a locker room with an individual locker for each boy. Upon the other side is a large bathroom with tubs, showers and toilets. There is a similar grouping upon the opposite side of the building for girls. Adjoining the girls' inner ward is a nursery unit of twenty-eight beds arranged upon the



The lamp room, shown in the top picture, is equipped with a quadruple arc lamp, which can be raised to any height. The room is ventilated with multiple down drop vents and draw fans, which ensures a constantly moving atmosphere. The x-ray room is shown in the lower picture.

south side of the corridor which is divided in the same way as are the other wards.

Across the corridor is a light room, which is 35 feet in diameter. It is octagonal in shape and has a dome ceiling. Suspended from the center of the dome is a quadruple arc lamp, 100 amperes d.c., so adjusted by a screw windlass that it can be raised to any given height up to thirteen feet from the floor. At the periphery of this dome, which is 16 feet in diameter, is an air duct with multiple down drop vents. This allows for incoming air (drafts are avoided) which is distributed by a fan. An out-take vent in the center of the dome is equipped with draw fans. This ensures constantly



The walls of the dining room, illustrated above, are pleasingly decorated in murals. In the picture below is shown the underwater gymnasium used in the treatment of patients with poliomyelitis. The pool is 6 by 12 feet in size and is from 18 to 30 inches deep.



The hospital physiotherapist is assisting a poliomyelitis patient to take underwater exercises in the pool. The child is reclining on a partially submerged table.



moving atmosphere. Twelve to sixteen children are placed in the room each time at a distance of ten feet from the arch. Here they remain for varying periods of time up to an hour. The aim in the use of this type of therapy is long time and long distance radiation. By the use of carbon lights an attempt is made to simulate as nearly as possible out-of-door exposure to sunlight. A deep tanning of the skin is purposely avoided. This room is used only from October to May when there are few bright days in this section. At present studies are being made of "control" patients who live under the same conditions but who do not receive arc lamp therapy. A large group of patients must be studied before any definite conclusions can be reached.

An Underwater Gymnasium

Next to the lamp room is an underwater gymnasium for the treatment of patients recovering from poliomyelitis. This pool, 6 by 12 feet in size, is raised three feet above the floor level and ranges in depth from 18 inches to 30 inches. Harness with an overhead suspension allows for the support and safety of the patient. A table partially submerged is used for exercises that must be taken in a reclining posture. A chlorinating and water heating system is incorporated in the unit. A gymnasium is a part of the underwater gymnasium room. This work, as well as the general physiotherapy, is cared for by two full-time physiotherapists.

Along the main corridor in the center of the building is a dental room with two chairs. The dental work is carried out by a part-time dentist who spends three mornings a week at the hospital.

Upon the opposite side of the lamp room is a kindergarten and playroom for the nursery chil-

dren. Across the corridor is a unit of two six-bed wards and four two-bed rooms. The walls of the two-bed and six-bed units, as well as the main dining room, are pleasingly decorated with mural paintings.

On the side of the building that houses the boys is a duplicate of the carbon arc lamp room, which is used at present for an assembly and play room. The bed space is shared about equally by the orthopedic and pediatric services. The active medical supervision of patients is provided by an orthopedic surgeon and a pediatrician, both of whom with their assistants visit the hospital several times weekly, and by resident physicians upon each service. The nursery care of the patient in each unit is supervised by a graduate nurse. A corps of nursery maids assists her. The hospital conducts a training school for nursery maids, who are housed with the other hospital help in a separate building that is located close by.

The hospital records are more complete than those usually used in a convalescent institution. Before a child is admitted, an application blank is forwarded to the hospital for consideration. This application blank includes a clinical and social history. Photographs are taken upon the admission of the patient and upon his discharge, these being incorporated in his history. The complete hospital record includes a front sheet, a history sheet, a laboratory sheet, as well as the temperature, pulse and respiration graphic chart, which also shows the weight curve and a record of the period of radiation in the light room.

The hospital has an unusually high bed occupancy—about 95 per cent—with an average per capita period of 179 days' stay for the orthopedic cases and eighty-four days' stay for the pediatric cases.

Can the Nursing Program Serve Two Masters?*

By EDWIN R. EMBREE

President, Julius Rosenwald Fund, Chicago

"SHOULD nurses be educated?" "Should trained nurses be trained?" "Is it reasonable that persons often entrusted with intimate responsibilities of health and life be provided with a rich background of instruction and experience?"

These are the fundamental questions regarding nursing education. By avoiding them, discussions of the whole subject have been clouded, from the time when Florence Nightingale founded the first modern nursing service at St. Thomas's Hospital, London, in 1860. Complex and extraneous considerations directed against improvements or changes in the training of nurses are constantly being brought forward by medical and hospital people whose real reasons are that they do not want nurses to be educated. On the other hand, advocates of improved training have confused the simple topic of education by heated arguments about the length of the course, prerogatives and professional status. For instance, certain nurse leaders have seemed to prefer a three-year course, however bad, to any shorter course, however good. Others insist that any female engaged in any activity connected with health and sickness (aside from the woman physician) shall be a nurse, shall be subject to the one "trade union" and shall enter it by the identical training.

A difficulty in discussing any plan of nursing is the fact that to-day there is included in the single term "nurse" diverse functionaries with widely varying duties. On the one hand are the hospital attendant and the private duty nurse.

For routine tasks of housekeeping and bedside chores in the hospital, or for attendance on long term sickness in the home, no especially intelligent person is needed. To insist that only well educated women be allowed to do such tasks is simply to be absurd and to confuse the whole issue of training. On the other hand are the public health and the school nurse, the supervisor, the health visitor, the psychiatric worker, the nurse-social worker and the obstetrical nurse who is beginning in part to take the place of the old mid-wife. These have serious responsibilities for human health and life. They should receive as thorough and as rich a training as is humanly possible.

The persistent difficulty in planning nursing education has been the tendency of hospital authorities to exploit pupil nurses as cheap labor for housekeeping and bedside care in the hospital.

The present situation is acute, because there is an oversupply of poorly trained nurses, who are being turned out by the great multitude of hospital schools, and there is a lack of nurses with sound training and real ability, qualified to assume responsibility. The number of hospital schools has grown notably during the past half century. In 1880, fifteen schools of nursing were reported in

What the Need Is

WE ARE in no need in this country of a greater quantity of nurses. The profession already appears to be overcrowded. What we need is a smaller number of nurses very much better trained for their great responsibilities for human health and life. This kind of graduate will come only from schools where education is the prime motive. This means adequate support from the community for schools of nursing.

the United States; in 1927, according to a survey of the American Medical Association, there were 2,155. Many of these are in small hospitals utterly inadequate either in number of beds, in supervising personnel or in general resources to maintain any proper school. Others are in large hospitals where the pressure of routine work is increased by the great number of patients that must be cared for by meager

*Read at the institute for lay boards of hospitals and public health nursing organizations, arranged by the Central Council for Nursing Education, Chicago, February 17, 1930.

budgets. At most only a few hundred institutions exist in the entire country of a sort that would, from the standpoint of rich experience and proper teaching and supervision, justify the name of school.

The existing 2,000 and more schools are turning out more nurses than are needed or can be supported in their profession. An estimate of the nurses actively at work, made by Dr. May Ayres Burgess of the Committee on the Grading of Nursing Schools, and reported in the volume "Nurses, Patients and Pocketbooks," indicates a total of nearly 200,000. Put in another way this means that for every 590 men, women and children in America there is an active graduate nurse who presumably must draw her cases and her support from the other 589. These figures do not include nurses who have married and left the profession, or the thousands upon thousands of attendants, ward maids and so-called practical nurses. It is estimated by the same committee that existing schools graduated into the already overcrowded profession 18,000 new nurses in 1926, 19,000 in 1927 and 20,000 in 1928.

To a layman the answer seems clear. The matter is doubtless complicated in its details, but in broad outlines it seems almost self-evident, first, that nurses (or at least such of them as contemplate careers of any considerable responsibility) should be well educated; second, that such hospitals as are unable to give sound training because of the meagerness of their resources should not attempt or be allowed to maintain training schools. To follow these two suggestions would at once reduce the number of graduates in nursing and would greatly increase the qualifications of those who did graduate.

Financing Nursing Education

This procedure would not mean so great a hardship financially as at first appears. Hospitals that closed their present schools would then have to employ graduate nurses for their bedside work. There is evidence that this would not cost much more than the present service by pupils. Hospitals have probably deluded themselves as to the cheapness of the service that they obtain from pupil nurses while in training. Several hospitals, notably the University of Chicago Clinics, have been using graduate nurses for their entire nursing service with good results and without excessive cost.

On the other hand, the maintaining of true schools of nursing does not mean great expenditure, judged by the cost of other forms of education. The highest type of school is probably that established about six years ago at Yale University

under the brilliant direction of Annie Goodrich. This has been endowed by the Rockefeller Foundation at one million dollars. This means a budget of fifty thousand dollars a year—a very small annual expenditure in view of the remarkable achievements and the national influence of this university school. Other schools of nursing are being maintained at Columbia, Western Reserve, Minnesota and elsewhere at surprisingly small cost.

Two Kinds of Nurses' Training

The difference between a school for the education of nurses and a hospital department in which pupil nurses get apprenticeship training is as great as the obverse and reverse sides of the same shield. In both instances, it is true, the nurse does a great deal of practical work in the hospital wards, but in one case this work is determined by the service needs of the hospital; in the other by the educational needs of the student. For example, while surgical nursing is one of the least of the training needs of the average pupil, yet in small hospitals where many of the poorer so-called schools exist, the pupil has more months of work in the operating room and in the surgical wards than in any other department, simply because this is the service most used by the hospital. Yet this is the experience probably least beneficial to the student. Where the school thinks of the pupil as a student rather than as a useful ward helper, the whole program is built up with the single purpose of education. While in such a school an important part of the training is actual experience in the care of sick persons, this care is supplied with a view to its educational value. Much the same principle is used in the so-called cooperative systems at the University of Cincinnati and at Antioch College, Yellow Springs, Ohio, where engineering and other students alternate between classroom work and practical experience, both the experience and the teaching being arranged with a view to its educational importance.

It is evident that if schools of nursing are to be maintained for educational purposes, this should be a charge upon the community as a whole just as is the case with other forms of education. It should not be a direct charge upon the general hospital budget or upon the cost of care to the sick patient. A start has already been made toward meeting the cost of schools of nursing from education funds. Yale has been endowed by the Rockefeller Foundation because of the interest of that foundation in education. Columbia and Western Reserve have received gifts from individuals who are interested in edu-

cation rather than in the care of any local sick group. It is, of course, not necessary that all schools of nursing should be affiliated with universities, but, whenever so conducted, it is eminently fair that the funds for their support should be thought of as education, not as normal hospital charges.

Not only is this fair, but it is necessary that there should be special funds specifically available for the budgets of schools, if they are to be free to plan educational courses. A school cannot serve two masters.

This is an era of higher education. Some 900,000 persons in America to-day are in colleges, professional schools and other institutions of higher learning, and some 4,000,000 are in high schools. It is generally assumed that a good social worker should have a college education before she enters training for that special profession. Stenographers and secretaries are expected to have at least a full high school course, and in increasing numbers they are being drawn from the ranks of college graduates. With this general situation in mind it is astonishing that the average pupil nurse begins her training after a single year of high school, and that many of them have not had even that much preliminary training. One reason why the better educated young women are not going into nursing schools is that they have recognized that these are not truly educational institutions.

When one contemplates the important responsibilities that attach to the administrative and supervising nurse staff in hospitals, the importance to the community of the public health and school and visiting nurse, the rôle that the nurse-social worker, the psychiatric nurse and the prenatal worker play in the improvement of mental and social conditions, it does not seem too much to ask that this functionary be given a broad and rich education.

What Do You Think?

The following letter received by the editor of THE MODERN HOSPITAL from Dr. J. F. Baldwin, Columbus, Ohio, deals with a subject regarding which there is much difference of opinion and it is therefore being quoted here in full:

"A brief article on page 73 of THE MODERN HOSPITAL for April condemns the admission to the operating room of others than doctors, nurses and medical students.

"It has always seemed to me that a relative or some other near friend of a patient about to be operated upon had the moral and I think the legal right to be in the operating room. That occasionally a male friend may have to be helped out because of fainting (I have never known female friends to be thus affected, their curiosity perhaps obviating the tendency to collapse), is undoubt-

edly true, and perhaps a visitor may indulge in exaggerated reports of what he sees, though I have never had such an experience, nevertheless when visitors are forbidden the idea is at once suggested that something is being done in the operating room that will not bear public knowledge.

"One of the saddest cases that I have ever had any knowledge of happened a good many years ago when a mother, whose child, a remarkably beautiful little girl, was to be operated upon, was absolutely forbidden to enter the operating room. She waited in an adjoining room, and after a few minutes was suddenly informed that her child was dead! She never recovered from the shock. It was an only child; she never became pregnant again, but was a mental wreck until her own death. Had she been present in the operating room and seen the frantic efforts that were doubtless put forth to resuscitate the baby, she would almost certainly have felt that the doctors did all they could and that the death was something that was unavoidable. But her attitude always was that the death was the criminal fault of the surgeon.

A Striking Case

"A few years ago I was consulted by a mother and her daughter, the latter having been pronounced well advanced in pregnancy by an indiscreet family physician who had not hesitated to noisise the fact in the neighborhood, notwithstanding the girl's vigorous denials. As a matter of fact, the young woman simply had a large ovarian tumor. I explained the situation to the mother but urged her to see that a number of the neighborhood gossips were present at the operation, which was made a day or two later. Needless to say the gossips were all on hand. They saw the tumor delivered and, a few minutes later, sectioned, so that the girl's reputation was untarnished. But had the operation been made without visitors, malicious scandal would undoubtedly have continued, with the additional charge that the pregnancy had been interrupted in the secrecy of the operating room.

"Admission of visitors should, therefore, in my judgment, be a part of the responsibility of the operating surgeon.

"For over thirty years, at the hospital with which I am connected (the largest hospital in the city), I think all the surgeons have followed my custom of admitting with reasonable restrictions relatives or friends to the operating room. I have never heard even a suggestion that that policy was otherwise than entirely satisfactory to all concerned, and we all feel that the widely prevalent suspicion in regard to what is going on in the operating room is completely allayed by our open door policy.

"One other point: Why should it not be a universal custom, enforced if necessary by legislation, for the attending surgeon to give to his patient when that patient leaves the hospital, or to some responsible member of the family or a friend, a full report of what was found and done at that operation? Hundreds of times in my own work knowledge of the work done by some previous surgeon would have been of very great value both as to diagnosis and advice as to treatment. Perhaps the former surgeon is dead and the urgency may be great. There are unquestionably occasional instances in which such knowledge should not be given to the patient, and when it should not even be given to an intimate friend or relative. Such occasions, however, are rare and when they occur the information could generally be given in veiled language which a subsequent surgeon could easily interpret."

Making Money and Friends Through the Physical Therapy Unit

By FRANK HAMMOND KRUSEN, M.D.

Director, Department of Physical Therapy, Temple University Hospital, Philadelphia

SINCE there is a need for every hospital to install a well equipped department of physical therapy, it was recently decided to establish such a department at the Temple University Hospital, Philadelphia. According to one authority, 2,100 of the 7,000 hospitals in the United States already have physical therapy departments, as compared to 4,400 that have clinical laboratories and x-ray departments. An editorial in the *American Journal of Physical Therapy* says that of a total of 6,807 hospitals, 2,091, or 30 per cent, have physical therapy departments.

After a careful perusal of the literature on the subject, authorities have formulated certain rules concerning the establishment of such a department:

1. The department should be headed by a physician with special training in this field. In the same way that an operating room is of no benefit to a hospital unless there is a good surgeon to use it, a physical therapy department is of no service unless

it is under the direction of a trained physician.

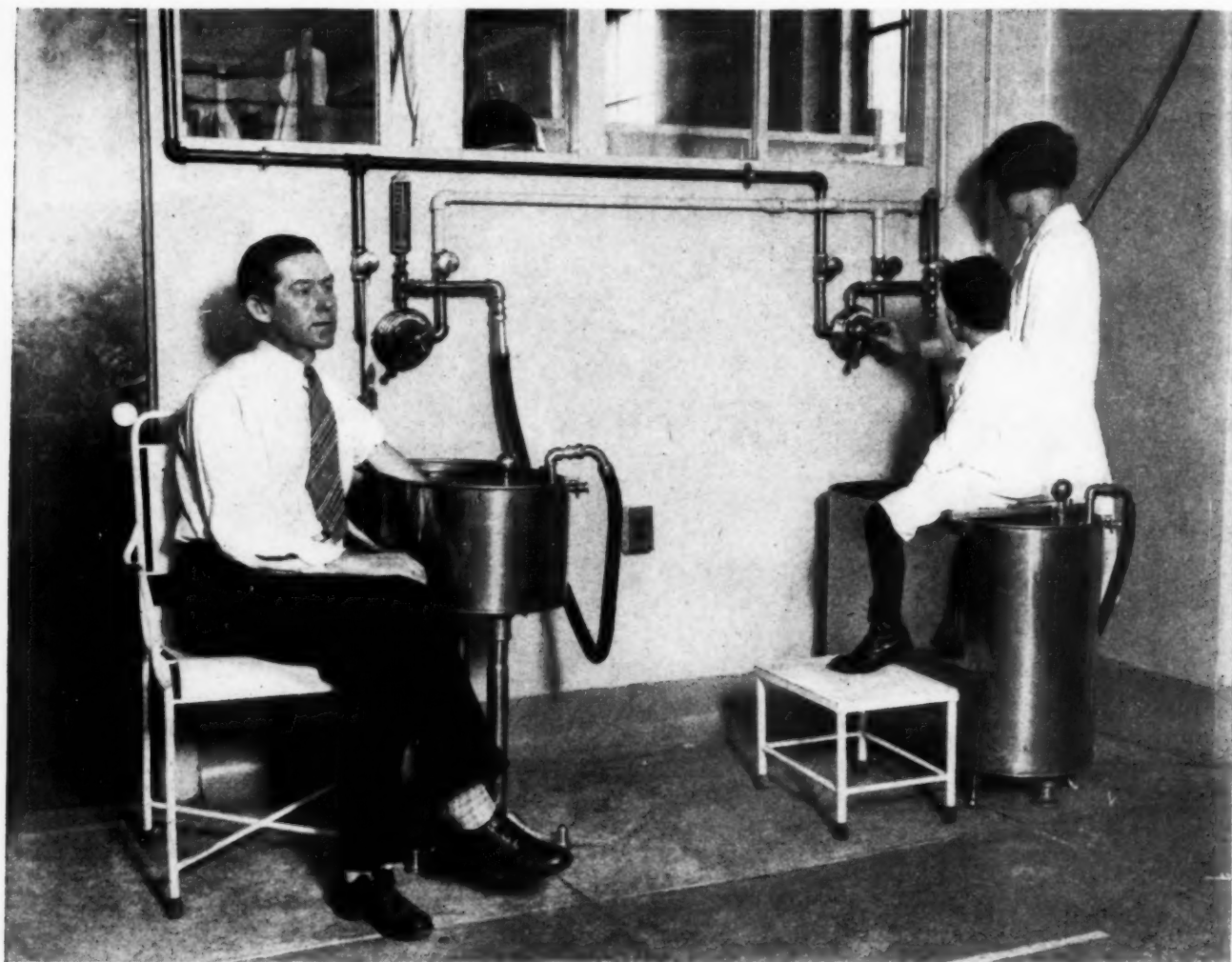
2. The personnel to serve under this physician should be adequately trained graduates in recognized physical therapy technical courses. They should have approached these courses either as graduates of accredited schools of physical education or as graduate nurses.

3. The department should have ample floor space, and it should be well lighted and well ventilated if it is to function satisfactorily.

4. The equipment should be carefully selected. It is in the selection of equipment that the novice will have the greatest difficulty, because he will be swamped with high pressure salesmen extolling the merits of their special pieces of equipment. Nowhere will he be able to obtain what he can confidently term an unbiased opinion. The only course open to him, then, is to investigate, carefully and painstakingly, the products of several commercial houses he believes to be reliable, and to make a choice for himself. He



A patient at the physical therapy clinic, Temple University Hospital, receives a treatment in which the wave generator is used.



The upper picture shows the arm and leg whirlpool baths which are necessary in the equipping of a physical therapy unit. Many patients are admitted daily to the static room, which is shown in the picture on the left.

will be wise to consult the council on physical therapy of the American Medical Association before equipping his department.

5. The minimum equipment should be as follows:

Two diathermy machines, one of which should be portable.

A wave generator for certain treatments.

An air cooled mercury vapor lamp.

A water cooled mercury vapor lamp.

A large deep therapy or radiant heat lamp.

Two small infra-red or radiant heat lamps.

An arm whirlpool bath.

A leg whirlpool bath.

A static machine.

Various pieces of muscle correction apparatus; shoulder ladder, wrist cone, wrist circumducter, stall bars, posture mirror, foot inversion tread.

Sheet tin, special electrodes, repair tools, connection cords, clips and necessary accessories.

6. A proper treatment record form should be obtained, as well as appointment cards, weekly report forms, refer forms and a record book.

7. The department should be conducted on an appointment system.

8. It should be realized that because of the prolonged treatments usually necessary, one technician can handle only a limited number of patients in one day. According to Dr. Norman Titus, director of physiotherapy, Beekman Street Hospital, New York City, "It has been estimated in the army that the best results are obtained by

requiring a technician to do not more than twenty-two treatments daily."

9. The department should serve only as an adjunct or treatment department. Cases should never originate in the department but should be referred from the other clinical departments after having first been carefully studied.

10. The director should encourage the physicians referring

the cases to suggest the treatment, but he should reserve the right to modify the treatment as he sees fit, after having first consulted the referring physician. This can usually be done amicably if the director will use a reasonable amount of diplomacy. In the same way that a physician who refers a case to the x-ray department specifies the results he desires but does not think of suggesting the exact technique for the roentgenologist to follow, so should a referring physician who

sends a case to the physical therapy department, indicate the results desired but permit the physical therapist to outline the appropriate treatment technique.

11. All patients should be seen at their first visit by the physician in charge and their treatment should be outlined in writing on the treatment record sheet. The physician should make it his business to see these patients at regular intervals thereafter, so that he may modify the treatment as he deems necessary.

12. The department should be open all day. (At the Temple University Hospital the clinic is open from 9 a.m. to 5 p.m.)

SAMARITAN HOSPITAL of TEMPLE UNIVERSITY

Refer Form

Date 2/3/30.

Name of Patient: John Doe. Address 123 N. 6th St.
Referred from: Fracture Clinic to Physical Therapy {Clinic
Diagnosis: Colles' Fracture {Ward

For your convenience in looking up history, the out patient history No. is B 6791.
Summary of Case: Sustained Colles' fracture, in fall
on 1/31/30. Fracture reduced and
arm placed on cock-up splint.

Laboratory Findings Negative-

X-Ray and Other Findings Xray shows Colles' fracture in
good position.

NOTE: Please state what studies have been made and give positive or negative findings

Remarks: - (Reasons for referring case) Referred for treatment-

Signed: — — —

Reply Form

Date 3/2/30 -

Report of findings while in: Physical Therapy {Clinic
Patient given infra-red and gentle effluage
followed by diathermy, static spark, stimulating
massage and corrective exercise. {Ward
Function now good-

Final Diagnosis: Colles' Fracture. Good position.

What further treatment is indicated? observation -

In what clinic should patient now be treated? Fracture-

The ward History No. is _____ Signed: — — —

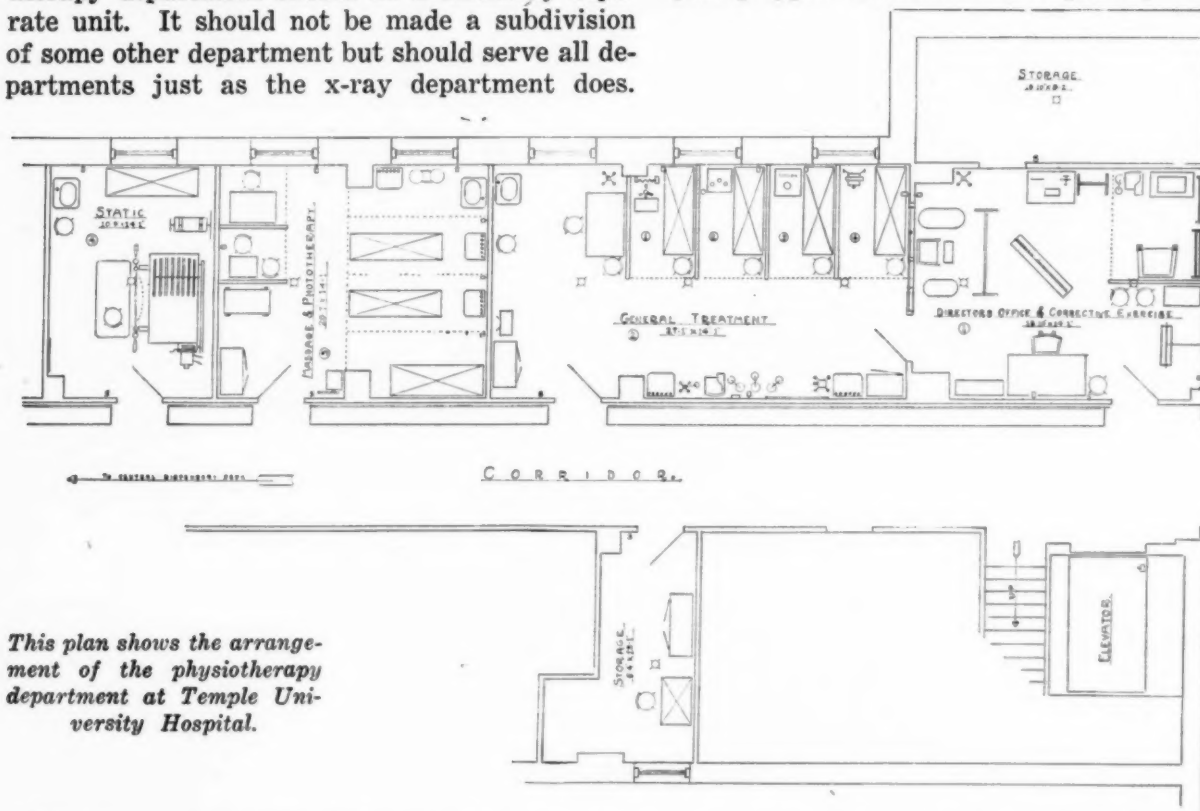
NOTE: This form is to be filled out in full and sent with the patient to the ward or clinic to which he is referred. To avoid duplication of work, the clerk or intern should consult this and the out patient history before ordering additional studies. The ward or clinic receiving the patient should return it with a report of its findings and recommendations for further treatment. Use space above for this purpose.

13. The rooms should be properly wired, with sufficiently heavy wiring and fusing to accommodate the apparatus to be used. The wall plugs should be placed about shoulder height, so that they are easily reached. They should never be left at the baseboard, otherwise constant stooping will be required whenever it is necessary to connect the apparatus.

14. The department should be organized on a moderate scale, taking into consideration the needs of the particular hospital that it serves. Provision should be made for expansion.

15. To function properly, the hospital physical therapy department should be a distinctly separate unit. It should not be made a subdivision of some other department but should serve all departments just as the x-ray department does.

Connected with the first room by means of a communicating doorway is the second room, a large treatment room, containing four cubicles and additional treatment space. At one end of this room is the chief technician's desk, a sink for supplying water for moist electrodes, an x-ray view box and a metal cabinet for electrodes, cords, meters and repair material. Cubicle 1 contains an air cooled quartz mercury vapor lamp, also a water cooled mercury vapor lamp. Cubicle 2 encloses a large high frequency machine of the high voltage type. Cubicle 3 contains another high frequency machine of the variable frequency type. Cubicle 4 is occupied by a multiple



This plan shows the arrangement of the physiotherapy department at Temple University Hospital.

The foregoing rules were carefully observed at the Temple University Hospital and plans were made to serve the 330-bed hospital and its active out-patient department. When the physical therapy department was opened on October 1, 1929, four rooms were assigned for its use. The arrangement is shown in the accompanying plan.

The first room contains the director's desk, together with several chairs for patients. One corner is partitioned and curtained, making a small examining and treatment cubicle. Because of limited space, it has been necessary to place at one end of this room the arm and leg whirlpool baths, which are screened from the rest of the room. This room contains also a shoulder ladder, a Sayre head sling, a posture mirror, a wrist cone, a wrist circumductor, a hand and wrist table, stall bars and a foot inversion tread.

Each cubicle is, of course, equipped with a treatment table, a stool, a chair and hooks on which the patient's clothing and the treatment chart may be hung. This room contains also an additional air cooled quartz lamp, a large deep therapy lamp, three small infra-red lamps, two portable high frequency machines and a Bristow Faradic coil. There are also book armchairs, similar to those used in students' classrooms, on which an arm may be rested during treatment. The hospital carpenter constructed a left-handed book armchair for use in treating injuries to the left arm. This is shown in an accompanying photograph. There are also cabinets for the storage of linen, towels, dressings and electrodes, as well as a cabinet for the technicians' clothing and uniforms. A storage closet is across the hall from the treatment room,

and another closet adjoins the director's office.

The third room is used only part of the time, since it is shared with other departments. In this room phototherapy, massage and therapeutic exercise are administered. The room contains two small dressing cubicles. The rest of the room can be screened into three sections, each containing a treatment table.

The fourth room is a static room, containing a large sixteen-plate Holtz type static machine, with a Wimshurst charger, an insulated platform, chairs and various static treatment appliances. A sink stands in one corner, at which static electrodes may be readily moistened. This room contains also a treatment table and a multiple lamp radiant heat baker.

The Procedure Outlined

The department began with the following personnel: a director, a full-time chief technician and a part-time technician who devoted herself to massage and muscle correction work. Elaborate plans were made to interest the various department heads and clinic chiefs in the work of the department. It was never necessary, however, to carry out these plans, for, to our surprise, we were operating almost to capacity within three weeks after the department was opened.

At the end of two months, it was necessary to add an additional full-time technician to our staff. At the end of three months, we were compelled to obtain another technician, this time a part-time male technician. We are now running to full capacity. We have recently had to institute a waiting list for patients desiring treatment. We had, fortunately, considered expansion of the department at the time of its inauguration. With the completion of a new dispensary building, now in the course of construction, we hope to have ample space for future growth.

The director is present in the department daily from 11 a.m. to 1 p.m. During this time, he sees and prescribes for all new patients. New patients are accepted only during these hours, unless by special appointment. He also follows up old cases, makes necessary changes in treatment and notes the progress of various patients.

Since the department is purely a treatment department, no cases originate in the department. The procedure is best described by outlining the steps the patient follows. When a patient who may need physical therapy treatment comes to the clinic, he is admitted to the proper department for the study of his particular disease. Here he is carefully studied. If the physician in charge feels that he should have physical therapy treatment, a refer form, reproduced here, is made

out and the patient is sent to the central clinic desk. Here he is given an appointment card, his name and history number are typed on a physical therapy treatment sheet and a fee is collected. The patient is then told to report to the physical therapy clinic between 11 a.m. and 1 p.m. His complete history, together with the refer form and the blank treatment sheet with his name and history number at the top, is sent to the physical therapy department by messenger. The director, after reading the refer form and studying the history, calls in the patient for examination. He then outlines the treatment. Whenever possible, the patient is immediately given his first treatment. The chief technician then marks the time for his next appointment on the back of his appointment card, and she lists his name on the weekly report sheet. In the few cases in which it is impossible to give the first treatment immediately, the patient is given an appointment to return at an early date.

On subsequent visits, the patient presents his card at the central clinic desk and pays his fee. At this time his history and treatment record are drawn from the central files and sent to the physical therapy department, where they await his arrival, as he proceeds from the central desk to the department.

When the director decides that the patient has had adequate treatment, he fills out the reply form at the bottom of the refer form and returns the patient to the original department.

Patients Come From All Departments

In the case of patients in the wards, the same refer form is filled out by the ward physician or his intern and sent to the physical therapy department. The director then visits the ward, reads the history and examines the patient. He fills out the same treatment sheet and attaches it to the ward history, following which procedure the patient is either treated in the ward by one of the technicians or sent to the physical therapy department for treatment. In either case, the chief technician makes the appointments for these treatments with the floor nurse. When the director feels that the patient has received sufficient treatment, he fills out the reply form and returns it to the ward.

Private patients from outside the hospital usually come with a letter from the referring physician, or else an arrangement is made by telephone for them to visit the department at an appointed time. They are sent immediately to the director's office, where he examines them and outlines the treatment on the regular treatment sheet. The director frequently consults with the referring



The infra-red lamp and high frequency machine in use.

physician by telephone concerning the treatment about to be administered. The patient is then taken in charge by the chief technician, and the outlined treatment is given. The same appointment cards are used for private patients. On the completion of treatment, the director communicates with the referring physician.

For private patients within the hospital a special consultation card is sent to the director by the referring physician. The director then sees the patient in his room and follows the same procedure as with private patients referred from outside the hospital. Private hospital patients are frequently treated in their own rooms by means of portable apparatus.

During October, 1929, the first month the department was open at Temple University Hospital, there were 506 patient visits. These patients received 1,333 treatments. In January, 1930, the patient visits had increased to 690, while 1,914 treatments were given. During the first four months it was in operation, the physical therapy clinic had over four times as many patient visits a month as the average clinic and the monthly income was four and a half times larger than that of the average clinic. It had nearly one-fifth of the patient visits per month for the entire clinic group, and it earned over a fifth of the clinic group's income.

Patients from nearly every dispensary and ward in the hospital are now being treated in the physical therapy department, and in many cases the patients' periods of disability are lessened considerably.

Charges have been arranged according to the patient's ability to pay. Dispensary, ward and private patients are all received and treated according to a sliding scale of prices. More than 50 per cent of the patients pay no fee whatsoever.

The department is used for teaching purposes, small sections of senior medical students being assigned as clinical clerks. They work under the supervision of the director for two-

hour periods twice a week for a period of three weeks. A new group of students is then assigned to the department.

The initial cost for equipment, exclusive of chairs, desks, cabinets, partitions, tables and linens, was slightly over \$5,000. While this may seem a fairly large initial investment, the department is now a little more than self-supporting, although little more than six months' old and notwithstanding the fact that over half the patients are free patients. It bids fair to become a profitable department. In addition, the lessening of the length of disability and thus of hospitalization of many patients, is an economic saving to the hospital and the community, which, while difficult to estimate, certainly is sufficient to justify the initial expenditure. The patients also feel that everything possible is being done to hasten their recovery and are greatly pleased. The department has thus helped to build good will toward the hospital.

The rapid growth of this particular department and the prompt and unsolicited use made of it by other hospital departments prove to us that it is providing a long needed service. As Dr. Norman Titus points out, "A rationally directed and properly conducted physiotherapy department should be included in the service given by every modern hospital."

Social Service—An Important Asset in the Nurse's Training*

By RUTH EMERSON

Director of Medical Social Service, University Clinics, University of Chicago

FOR a number of years nursing educators and hospital social workers have been considering possible ways whereby the student nurse may round out her classroom instruction and experience with her patients in order to gain a more complete understanding of the meaning of illness and to become cognizant of the factors in health promotion.

A realization of the nurse's opportunity to teach health and to contribute to the general well-being of the patient and his family is not new and appears in many of Florence Nightingale's writings. The development of the social service department in the hospital created the opportunity for the student nurse to get first-hand appreciation of the social aspects of ill health. Here was a department of the hospital whose primary function was to study the patient as an individual and in relation to his family and environment, to interpret to the physician the social factors of significance in his illness and in his recovery, and to deal with them in a way that would promote his welfare. What could be more appropriate than to ask this department to allow student nurses to spend some time not merely observing but actually participating in its work and to have the head of the department give a course of lectures to the student group.

Some Early Experiments

One of the earliest experiments of this character was begun in 1912 by Ida M. Cannon at the Massachusetts General Hospital, Boston. With modifications this work continues at the present time. Two more recent and comprehensive plans are those that have been worked out at Western Reserve University, Cleveland, under the direction of Agnes Schroeder, director of the course in medical social work, and at Washington University, St. Louis, by Ruth Lewis, the associate director of hospital social service. Frequently the courses given at the different hospitals have been makeshifts, but the earnest solicitation of the training school and a realization on the part of

the social service department of the importance of having the nurse understand something of the social side of the patient's care have made many hospital social workers willing to undertake some kind of a program, although often with misgivings because of the department's limitations.

Formulating a Curriculum

The American Association of Hospital Social Workers has conducted at its meetings a number of round table discussions on the social service department's participation in training school courses. In 1927 Miss Schroeder made a report on the replies to a questionnaire that she had sent to more than forty hospital social service departments that she knew were concerned with teaching problems of student nurses. From the experience of these different departments much of interest has emerged. It should be possible in the near future to formulate certain general principles of the content of courses the social service department may be prepared to give and the method of instruction, together with a statement of the conditions essential in effectively carrying out this program. A section of the committee on education of the national association is working on the subject as a whole and I believe that the time is approaching when members of the National League of Nursing Education and of the American Association of Hospital Social Workers might profitably work together, if not as national groups then at least in their regional organizations, in evaluating the experience of the past and in formulating plans for the future.

The committee on education of the National League of Nursing Education has rendered an invaluable service to all persons interested in nursing education by formulating a curriculum for schools of nursing. This committee presents with clarity the objectives of the training school and outlines in detail the subject matter of its courses. Another conspicuous contribution is a report of the committee on functions of the American Association of Hospital Social Workers. This report is based, as is the curriculum study, on an analysis of what hospital social workers

*Read at the Institute for lay boards of hospitals and public health nursing organizations, arranged by the Central Council for Nursing Education, February 17, 1930, Chicago.

do in their work with patients. Out of it have been precipitated statements of activities appropriate to the social service department and which we term, therefore, functions. The curriculum report is more than an outline in that it points out goals and paths leading to them. Similarly the functions report is more than a study of practice because it, too, points out the method whereby the functions of the department may be performed. Because these two studies come from the professional groups concerned with the problems, they give a sense of security to those interested in the social aspects of nursing education. On the one hand they offer a picture of what the training school seeks to accomplish and on the other of what the social service department does. One is free to make one's own application of the ways in which the work of the social service department lends itself to the accomplishment of the training school's objectives. Anyone who studies these two reports and focuses his attention on the curriculum will find, as I did, a real challenge in discovering for himself where and how the social service department may fit into the training course.

I should like to indicate a few of the points at which experience in the social service department provides an essential element in fulfilling the requirements of the curriculum, which Adelaide Nutting says "has been developed on the assumption that the social, preventive and teaching elements of nursing should be taught in all good nursing schools."¹ Under the analysis of what the nurse does for the patient we read that she "helps to conserve patient's strength by relieving pain, by imparting confidence and sense of security and by guarding against physical or nervous tension or over exertion, shocks or excitement, friction, worry suspense."

What the Nurse Must Know

How can the nurse impart confidence and a sense of security to a patient who explains her crying and inability to sleep by saying that her husband has lost his job, that the children are with her sister, but her brother-in-law is unwilling to keep them and that she is afraid her landlord may throw out her furniture while she is in the hospital, because the rent is three months in arrears? Must the nurse not know to whom to turn for assistance and what resources the community has for dealing with such problems? Does any nurse, without experience, know how to act in such a situation or how to attempt to manage it? The nurse may assure Mrs. Jones that

the community will not allow her children to suffer, that the hospital will keep her until she is feeling stronger, but the assurance will sound hollow and will carry little conviction unless the nurse knows that she can meet Mrs. Jones' misgivings by explanation and not by mere repetition of general statements. Again, how can the nurse keep Mr. Smith, a diabetic, from worrying about where he can go when he leaves the hospital, unless she knows something of the community's provision for homeless men?

Instructions Must Be Practical

Another statement of what the nurse does reads: "Teaches and helps patients who do not know how to care for themselves and their families, to protect themselves from disease and to improve their physical and mental health." I am reminded of a baby with eczema who was admitted to the hospital several times. Each time the child was discharged his condition was good; each time he was readmitted he was covered from head to toe with patches of eczema; each time the child was discharged the mother received written instructions from the doctor and nurse as to what she should feed the baby and how she should bathe him. But her home consisted of three rooms in which she, her husband and four children under seven lived. There was no running water and only a wood burning stove. The instructions that the hospital gave might have been adequate for a mother with four children, who lived under reasonably comfortable conditions, but when we speak of teaching patients and helping them to care for themselves and their families, we should mean the conveying of information so that it can be used by the particular individual for whom it is intended. It is important for the nurse, if she is to be a teacher, to know something of the limitations and resources of her pupil, the patient, and to have a method of dealing with these limitations and increasing the resources when necessary.

Under the heading of what the nurse does for the hospital, we find this: "Cooperate with other nurses, with the officers and physicians in the team work of the hospital and nursing school." Often we think of cooperation as being something that depends entirely on spirit but, although this is an essential and vital factor, at least a grain of knowledge of the other person's job is necessary if cooperation is to be a reality and productive. I believe all of us agree that good team play between the different hospital groups, particularly physicians, dietitians, nurses and social workers, is fundamental, but one does not make a good team player without understanding the

¹ Curriculum for Schools of Nursing, National League of Nursing Education, New York.

game and having some knowledge of the positions that each man plays. Similarly, the nurse and the social worker cannot cooperate and thereby further the care of the patient, which is the goal of each, without some knowledge and appreciation of the contribution each may make and of the means by which the contribution is made.

Social Factors That Affect Patients

Before considering the outlines of the courses that are a part of the curriculum, let us consider the hospital social service department, the primary purpose of which is to provide a center for the study and treatment of the social factors that affect the health of the patients. These factors may roughly be grouped as: (1) those that bear directly on the patient's health, as the living conditions and occupation of a cardiac patient; (2) those that affect others, for example, the financial status of the family because the father is in bed for months crippled with arthritis, and (3) those that exist apart from the patient's illness but may first be discovered during his stay in the hospital or while he is attending the clinic, for example, the need for vocational guidance of the fourteen year old daughter of a patient in the hospital for hernia operation.

The social worker has a method by which she may study, analyze and treat such problems. She deals with the situation herself or refers it to the community agency within whose special field the problem may lie. The hospital social service department works in close association with other social agencies, and many patients present problems on which several agencies may work in conjunction, each contributing its special skill.

It seems reasonable to expect the individual social service department to yield its experience to the student nurse so that she may gain an understanding of her patient, appreciate the possible ramifications of ill health and become acquainted with the use of the community's social and health agencies. Courses for the preparation of hospital social workers are being given in the schools of social work, so that there is experience in this field to draw on in planning to teach nurses the social aspects of patients' problems.

Methods used by hospital social service departments in teaching student nurses include lectures, group discussion, observation visits to community agencies, home visits to patients, and the assignment of a student for part-time work with the social worker in a clinic or the assignment to the social service department for full-time work, for a period varying from two weeks to three months. Case studies that are now used by so many schools of nursing are frequently

the means by which the social service department and the student nurse have been brought in touch with each other.

I should like to discuss the particular values that seem to me to lie in these different methods, and to consider the place in the curriculum at which each may be used. During her first few months in the training school, the student is required to make so many adjustments and adaptations that I believe no special or formal consideration of the social factors in her work should be presented during this period. Furthermore, it is doubtful whether any social interpretation of patients will have meaning for the student until she is actually working on the ward with patients. It is important, however, that the student's interest in her patients as individuals who come from different types of homes with different backgrounds, attitudes and fears, and varying responsibilities, should be captured and stimulated early in her work with patients.

It seems to me that a series of lectures and discussions with prescribed reading, which will give the students the background of the hospital and the patients admitted to it, will give the student a necessary foundation. There should be discussions of various types of problems, such as the care of a patient with a fractured femur, who at the time of discharge from the hospital still has his limb in a cast and is in need of bed care, or a patient needing convalescent care, and the reasons, medical and social, why the convalescent period is important and often is best arranged for outside the patient's home. As a part of this course should be included a few visits under supervision, for example, to a settlement house, the public library in a foreign district, a special school and a children's institution.

Visiting the Patients

Visits to patients' homes are exceedingly difficult to arrange, but may have great significance when one or two students go with a social worker, who on the way explains the reason for the visit and uses it as a basis to discuss some of the social and medical factors that often are interwoven and that must be unraveled in order to make the patient's treatment effective. The home visit should also help the student to realize that the patient's ward experience is really only an incident, an important one, to be sure, but an incident that usually covers only a brief period in his life and that much of its importance lies in the way it equips him to reestablish his health or teaches him how to live effectively within his limitations.

Following this introductory course the contribution from the social service department can

perhaps best be made in connection with case studies. To be effective these require, I believe, the participation of the social worker. Presumably all nurses are familiar with the objects of case study methods two of which are: (1) to develop an attitude of mind toward the patient that makes him the center of thought, placing procedures and routines in their proper relationship as means rather than ends in themselves; (2) to stimulate the student to meet her problems by critical thinking and by relating facts given in other courses to specific conditions found in the wards.

Utilizing Case Studies

Miss Schroeder, to whom I have already referred and Miss Wilson, instructor and supervisor of medical nursing at Western Reserve University, have published in *Hospital Social Service* a report of a cooperative effort to utilize the student's case studies as a method of stimulating her to assemble the social data in regard to her patient that seem to her significant. The outline for the social case study was prepared by a group of the social service staff and the instructor of nursing. After the student has gathered her material, Miss Schroeder and Miss Wilson have a group conference to discuss and outline the next steps in social study or treatment. Later, the student records the ways in which they were carried out and the part she took in them.

From the social point of view, a weakness in the present case study method lies in the failure often to have a social worker explain to the student the meaning of the section on social data, or to go over the material with her and interpret its significance or elucidate the general social principles that may be drawn from the record and point out how they may be applied in other situations. As one of the reasons for using this method is to "give the student a significant method of study or approach to a problem," it is important that the data gathered should be evaluated and related to the problem undertaken for study. But without guidance and without some form of group discussion by a person thoroughly familiar with interpreting social data, I question whether a student nurse can distinguish between the social factors that are relevant and important and those that are unimportant. Even the slight acquaintance that a student will have with handling social material should give her some guidance as to what may always be expected to have significance and what is of special significance in various types of problems. For example, in the case of a man with acute appendicitis, it is unimportant whether or not his wife sends out the

family washing, whereas if his wife were the patient and she had heart disease one of the most important things to know would be whether she does the family washing and cleaning. The case study is none the less an important means whereby the student may get a comprehensive grasp of her patient's background.

The student's program in the second and third years covers medical diseases, general and special; surgical diseases, general and special; pediatrics, obstetrics, diseases of the eye, ear, nose and throat, and psychiatric cases. The curriculum includes in the second year a course called "Modern Social and Health Movements," the purpose of which, in part, is outlined as follows: "To give a historical background for the appreciation of modern public health and social work. It is not the purpose of this course to teach any specific technique or methods. Definite methods relating to social, educational and preventive problems in nursing work should be taught in connection with practical experience and case studies in the hospital, dispensary and, when experience is available, in connection with community nursing work.

"To define the most outstanding problems in public health work with its related social aspects, instances of which will be met in the individual cases studied; to outline the programs that are being developed to meet these problems.

"To stimulate the students' interest in the larger aspects of social health work and to help them to know where they may obtain further information along these lines."

Social Case Problems

It is important that the study of the conditions outlined include their social aspects. This can best be accomplished by a discussion of social case problems of patients with these diseases. Out of the discussion will naturally follow a consideration of the larger aspects of health work and the special programs that are being developed in different fields. The students' case studies should provide much of the material for discussion, but it is important that cases in which there has been social treatment over a considerable period of time and cases in which treatment has been completed should be studied and analyzed.

The changes in medical practice during the past decade are such that the treatment of many diseases requires the active cooperation of the patient, his perseverance and determination. In order to understand the treatment of heart disease and appreciate the reasons for the formation of the Association for the Prevention of Heart Disease, the physician, the nurse and anyone who

is studying the problem must see more than the hospital or out-patient picture. What the results of rheumatic fever may mean to a child will be more fully grasped if one has seen at home a child with a damaged heart, willful and restless, uncontrolled by his parents who have been told that he should remain in bed, but who feel sorry not to let him play outdoors a little with the other boys.

It is important that the student nurse grasp the attitude of the social worker toward such problems and make it her own. The social worker expects that the parents and child can be influenced in their behavior, that there are capacities within them that can be directed and developed and that in the community will be discovered resources which, if necessary, can be molded to meet the needs of the individuals.

The nursing care of a patient who was operated on and found to have extensive carcinoma may be relatively simple and to assist in the giving of deep x-ray therapy to such a patient requires nice technique, but to understand the cancer patient often means that the nurse must appreciate the dread many persons have of this disease. She must realize what one day after another spent in bed and in constant pain may mean unless there is interest on the part of friendly individuals, nursing care that brings comfort and a physician to supervise and prescribe drugs when the pain cannot be endured. The nurse must also face what this patient's incapacity may mean to his family. Is the patient the mother, for whom housekeeping or home making plans must be made, or the father, who has been the wage earner of the family? A discussion of such situations will give the student understanding of the campaign for the early diagnosis of cancer.

Peace of Mind an Important Factor

The medical and nursing care of the orthopedic patient is important and must be long continued, but what is of greatest interest to a young woman with tuberculosis of the spine is whether she will be able to return to her school teaching or must prepare herself for some other vocation. It is important to remember that what is of vital interest to the patient is neither his disease nor its treatment but the effect that his illness will have on his ability to carry on his work and how soon he can resume it. We are told that peace of mind and contentment are important factors in the treatment of tuberculosis. Some indication of the difficulty with which they are often attained will be revealed by a discussion of actual case records.

An opportunity during the second and third years to unite the student's experience in the clinics with experience in the social service department seems to me most desirable. In one hospital the student nurse who is assigned for three weeks to the pediatrics clinic spends her mornings there during clinic sessions and her afternoons with the social worker, who plans her time, selects the material on which she will work to gain insight into the problems of the sick and well child and supervises her work. During this period she should get a well rounded picture of the factors in home life that add to or complicate the child's care, the place and importance of diet instruction and health education and the function of the school and other organizations in the community concerned with child health. Similar schedules are worked out for nurses assigned to the orthopedic and skin clinics.

Supplementing Clinic Work

The out-patient clinic offers a fertile opportunity for the student nurse to grasp principles, gain an appreciation of standards and ideals and coordinate these with performance. The ambulatory patient is still carrying on with some degree of completeness his usual activities. He presents, therefore, a more normal picture than the ward patient, who is separated from his natural environment and is in a wholly artificial setting.

When opportunity has been given the student nurse to participate in the work of the social service department on full time, it has usually been in her third year, when often there is a two or three months' period that is elective. This experience has been considered important, not only to help her understand the patient in relation to his family and environment and the implications of his medical treatment, but also to spread before her a picture of community problems in which health is an important consideration. Unquestionably, such experience has value. But it seems to me doubtful whether the period, be it two weeks or three months, is of sufficient value to make it a worth while investment for the student or to justify the burden it places on the social service department. Furthermore, I am convinced that if it is possible to round out the student's clinic experience, as is already being done in some places, by having her see the social factors inherent in the provision of adequate clinic care and participate in handling some of the clinic's social problems, she will have a much more valuable experience. Such experience for students can probably be more satisfactorily managed by the social service department.

We have made frequent reference to the neces-

sity of understanding the patient, of helping him modify his attitude and the need of dealing with others in his social group for the same purpose. Since the curriculum recommends that the student's course in psychology, including mental hygiene, come in her first year, it may be fair to assume that she has some understanding of the psychiatric approach to behavior. Nevertheless, frequently it will be valuable to have a psychiatric worker take part in the social case discussions to clarify these factors. It is, of course, important that whatever experience the student has in psychiatric nursing be supplemented by social interpretation of the problems she is studying and that she get an understanding of the essential factors in an adequate mental hygiene program for a community.

The value of experience in the social service department depends on several factors but particularly on the amount of time that is to be given to it, its place in the student's course and the adequacy of the instruction and supervision that the social service department is prepared to give to the student. Miss Nutting has called attention to some of the essential considerations for proper education, and the statement strikes a responsive chord in the experience of medical social workers. She has said that "Schools of nursing should be scrupulously sensitive in seeing that the instruction they offer is given under conditions that will in no way lessen or impair its value."

What Beginners Study

It is important that the first course begin practically simultaneously with the student's work with patients and that other courses continue systematically throughout her training. It has usually been taken for granted that the director of the social service department should be the instructor, but more often than not she has had no teaching experience and has been selected for her position because of her skill in medical social work and her executive ability. Furthermore, the demands of other phases of her work leave little opportunity to give time to such courses. There seems to be no reason why, necessarily, she should be the person to teach the student nurse. It is important that if any teaching obligations are to be assumed a member of the department should be appointed who has special ability in teaching and she should be allowed time to formulate her material and carry through the course. This member of the department may be suitably appointed as a member of the training school staff and it seems to me fair that in some instances her salary should be met in part by the training school.

Since the primary obligation of the social service department is case work with patients and the staff often is too limited to do this job adequately, I believe no one thing would do more to improve the quality of the experience offered to student nurses in the social service department than to free a reasonable amount of one person's time so that she might organize and supervise if possible the whole plan, though of course other members of the social service department would participate in it. It is also important that one person be in charge of a given course and that she herself teach most of the classes, since continuity is an important factor for both student and instructor. There is value also in having the class meet once or twice a week over a period of several weeks, rather than more frequently over a brief period.

Why Social Courses Are Valuable

The curriculum rightly assumes that the social service department will cooperate with the training school and will be glad to participate in its teaching program. It places emphasis on the general and basic character of the courses for all students, thereby making it clear that the social courses are thought of as contributing to the fundamental equipment of all nurses and not as offering vocational experience for any social group. The American Association of Hospital Social Workers shares this point of view and recognizes an obligation to the training school as well as to the medical school to formulate material and develop methods whereby students will gain an awareness of the social factors in illness, an appreciation of the social values of health and the knowledge of how to work effectively with the social service department both in individual cases and in the more general problems of health and disease prevention. The association appreciates the necessity for a flexible plan that can be adapted to the needs of different communities, and recognizes that whether one or more courses are to be given the question of how much time and under what conditions the social service department can most effectively participate must be squarely faced.

The values that should accrue to the student from this experience will add to both her professional and personal development. Any course that is truly educational must consider the development of the individual quite as much as the mastery of a field of knowledge or skill in practice. Student nurses are for the most part young persons with limited experience in life, eager and responsive, but like other young persons they require leadership and guidance.

A Constructive Laboratory Plan for the Small Hospital

By JOSEPH FELSEN, M.D.

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THE laboratory facilities in the average small hospital are often inadequate for two reasons: the relative scarcity of available highly trained full-time pathologists and the prohibitive maintenance cost of a good laboratory. Both of these obstacles may be overcome by an arrangement such as is outlined in the following plan.

1. The hospital laboratory: primary equipment for carrying out simple routine and emergency procedures; trained resident technician.

2. The pathologist: functions—organizing and directing the hospital laboratory and acting as consultant in laboratory studies on hospital patients; delegating the more complicated and expensive examinations to the pathologist's laboratory; transmitting specimens and reports—daily transmission of specimens by air mail or parcel post and making reports by first class mail, telegraph or telephone.

3. Hospital expense: cost of primary equipment, such as plumbing, carpentry, electrical work, technical apparatus, chemicals and biologicals, office furnishings and supplies; cost of replacements; salary of technical assistant; salary of pathologist.

4. Sources of reimbursement to hospital: fees paid by resident patients—a single uniform fee for all laboratory work and a fee proportionate to the number and nature of examinations; fees paid by ambulatory patients—those referred by staff physicians and those referred by other physicians of community and near-by towns.

The various divisions of the plan will now be considered.

Necessary Equipment

Primary equipment: For the proper execution of routine and emergency examinations the equipment described in the following paragraphs will be found to be serviceable. It will also serve as a nucleus for future development, the necessary additions to be made as the need arises.

After many years' of experimentation with chemically treated wooden table tops and with those of glass or waxed linoleum, I have found

what I consider the ideal table top. It is of alberene stone slabs $1\frac{1}{4}$ inches thick supported by movable drawer and closet units, and leveled. For most purposes 5-foot slabs, 24 inches in width will be found most useful. Adjoining slabs are cemented together by means of a glycerin litharge paste. The stone may be ordered direct from the Virginia mines. It can be cleaned readily but has the disadvantage of scratching easily. With ordinary care, however, these tops maintain a fine appearance for at least a decade. The movable supports consist of a chest of two drawers and a closet. Because these units may be moved about, they accommodate themselves to any size or shape of room. When additions to the laboratory are made, more units and slabs are provided. The units may be constructed by the hospital carpenter at a cost of approximately \$15 each, depending upon the labor and the material. For ordinary purposes well seasoned pine will do, although oak makes a heavier and sturdier job. The inside measurements of each of the two drawers are: length 19 inches, width 19 inches and depth 5 inches. The length of the unit, that is, from front to rear, is $\frac{1}{2}$ inch less than that of the stone top. This allows for an overlap of the top in front. The size of the unit—outside measurements—as shown in the drawing is 32 by 24 by $23\frac{1}{2}$ inches.

A Serviceable Sink

The sink that has been in use in my laboratory for many years consists of a high grade, rectangular, acid resisting white enamel washbowl 24 by 20 inches, supported on a single central white enamel floor pedestal. The bowl has a depth of a little over 6 inches and is furnished with a sleeve collar drain controlled by a push knob situated midway between the faucets, and a central bowl overflow. This bowl is equipped with the ordinary inverted U barber shop spray fixture. This inexpensive device provides a hinged, central, high mixing nipple tap 23 inches above the bottom of the bowl, thus permitting the thorough direct washing of the 18-inch Folin-Wu pipettes and even longer cylinders. This same tap serves

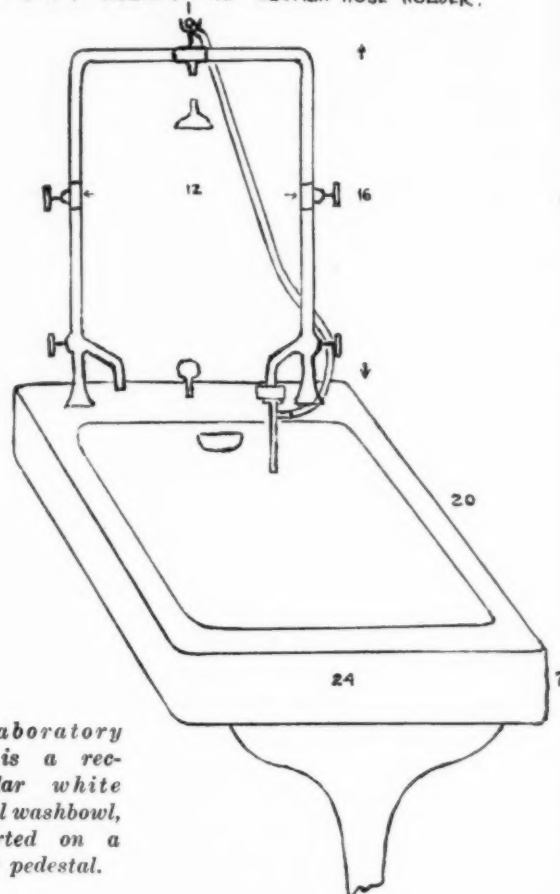
as a source of water supply for a still and, in conjunction with the removable spray head supplied, as a convenient washing spray of any desired temperature. A small suction pump is permanently attached to the cold water faucet, the suction hose being held in the U support which forms an integral part of the central tap. The third or hot water outlet is useful when the central tap is being used for some other purpose.

Three closets for the storage of chemicals and glassware may be built into the wall or suspended from it by means of a 2 by 4 strip of wood and large expansion bolts. The bottom should be 5 feet above the floor so that no unnecessary floor space is utilized and so that laboratory tables or desks may be placed underneath. The chemical closet should have six 1-inch holes bored in the top and several on either side in order to allow for adequate ventilation.

Keeping the Records

Permanently bound record books may be made to order and, if purchased in half dozen lots, are relatively inexpensive. The cover is impressed with the name of the hospital and number of the book. The pages are ruled for thirty lines and columned, so that all necessary details on any particular patient are on one page and do not overlap the seam. Running a record over the seam makes recording and reading surprisingly difficult. The columns are headed as follows: Number; Date; Name; Address; Doctor; Specimen; Examination; Report; Charge; Paid. Approximately one half of the width of the page is allotted to "Report." A conveniently sized record book is 10 by 18 inches. No cross index system is necessary. When an old report must

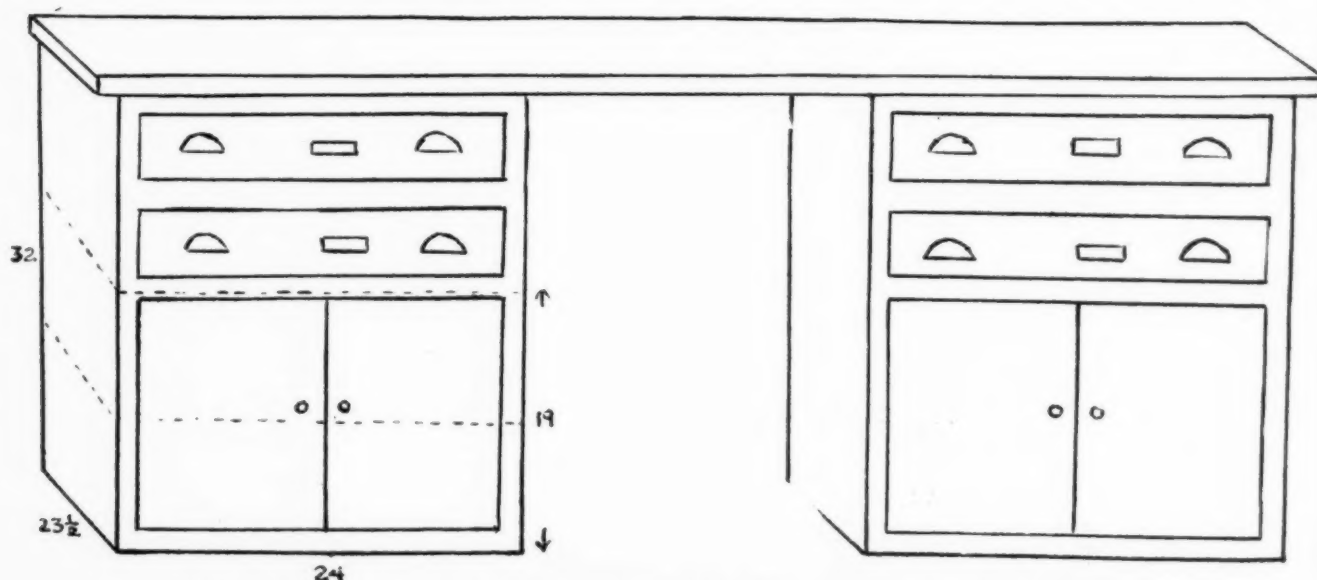
HINGED HIGH CENTRAL NIPPLE MIXING TAP WITH SPRAY NOZZLE AND SUCTION HOSE HOLDER.



The laboratory sink is a rectangular white enamel washbowl, supported on a floor pedestal.

be referred to, knowledge of the approximate date is sufficient.

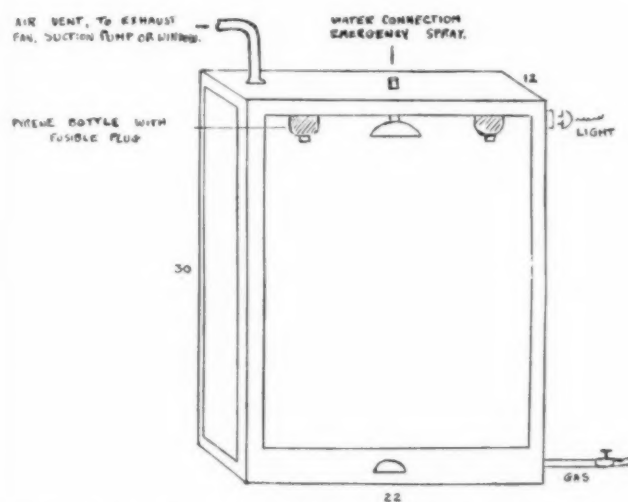
For all practical purposes one request form and two report blanks are entirely adequate. Request slips, 5 by 3½ inches, are submitted for any desired examination. The printed data as in the case of the report forms are brief and devoid of



This table designed for use in the laboratory may be readily cleaned because the top is of stone.

any unnecessary and time consuming details. The report sheets are of two varieties and sizes to correspond to the clinical chart: (1) a combined blood and urine report (yellow sheet), on which the heading of the various examinations usually asked for are so placed that the findings may be quickly and clearly recorded, as a result of which much time is saved since the bulk of hospital laboratory work consists of urines and blood; (2) general report form (white sheet) to be used for any examination other than that of urine or blood.

A fume chamber has been devised as an important, yet inexpensive asset to the small laboratory. It is a box constructed of wood with a



The fume chamber is an important adjunct to the laboratory.

glass panel in the front door which slides upwards. A simple counterweight and pulley arrangement may be used. The size over all is 22 by 30 by 12 inches. The interior is lined with sheet asbestos cement and the top is provided with an air vent, water spray and fire extinguisher bottles for emergency use. There is also a glass enclosed electric light. A gas connection with the cock outside the chamber is provided near the bottom.

In addition to the items already specified, the following miscellaneous equipment will be found useful:

Stools, gray enamel	2
Chair, gray enamel	1
Mailing containers, aluminum, egg type ..	3
Office and cleaning supplies (towels, soap, ink, pencils, clips, envelopes, stamps)	
Typewriter	1
Desk with collapsible typewriter compartment	1
Lamps, suspended over tables by adjustable cord, cobalt blue fire resistive glass filter in metal shade.	

The illuminating units are relatively inexpen-

sive. While it is preferable to have a laboratory on one of the upper floors not far removed from the operating room, with a generous northern exposure, the latter is not essential. When additional ventilation is required the adjustable window exhaust fans are useful. Since a certain amount of fire hazard is present in every laboratory, it is well to place the latter above or entirely apart from the wards. A uniform slate gray color scheme to my mind is best suited for the average laboratory.

Technical supplies¹ comprise the following:

Basal metabolism outfit, flutter valve type, complete, including mouth pieces (3), oxygen (60 lbs.), soda lime (10 lbs.), nose clip and couch	1
Rubber tubing, 1/4 inch, 20 ft.	1
Needles, 20 gauge, 1 1/2 inch	12
Syringe, all glass Luer, 10 c.c.	2
Syringe, all glass Luer, 2 c.c. with needles ..	1
Hemocytometer, American standard, Levy chamber with double Neubauer ruling, in case	1
Blood diluting pipette, Thoma, for red corpuscles	2
Blood diluting pipette, Thoma, for white corpuscles	2
Micro slides, 3 by 1 inch, Red Label type, gross	2
Micro slide box, 100 slide capacity	1
Micro labels, 22 mm. square, carton	1
Micro cover glasses, 22 mm. square, no. 2 thickness, oz.	2
Microscope, FFS8, with 16, 4 and 1.9 mm. achromatic objectives, 5x and 10x oculars, circular triple nosepieces and 1.20 N. A. condensor, in case	1
Mechanical stage to fit above microscope ...	1
Hemometer, Sahli	1
Micro-lamp, substage type, 110 volt	1
Petri dishes, 100 by 15 mm., pairs	24
Culture dish box, copper	1
Culture tubes, 150x16 mm.	100
Lamp, alcohol, brass, 4 oz.	1
Tubing, glass, 3 mm., lb.	1
Tubing, glass, 7 mm., lb.	1
Tubing, glass, 9 mm., lb.	1
Rod, glass, 4 mm., lb.	1
File, triangular, 6 inch	1
Test tube support	1
(with 18 large and 72 small pins, for wall)	
Brushes, test tube	12
Sterilizer, syringe, W.E. soap dish with cover	1
Incubator, C. S. and E. electric No. 11 complete	1
Cotton, nonabsorbent, lb.	1
Cotton, absorbent, lb.	1
Baskets, test tube, 6 by 4 by 5 inches	6
Mailing containers, with removable address card, approximately 12 by 8 by 4 inches ..	3
Bottles, sputum, with corks (for pneumococcus specimens)	12

¹ No autoclave is provided, since it is best for the average technician to burn in the hospital furnace all infected material no longer required. Other materials (glassware, solutions) may be sterilized in the operating room sterilizer. The latter usually has a still which provides for laboratory needs.

Ice box, electric or gas, small household type	1	50 c.c. in 1	2
Bottles, urine specimen, 120 by 30 mm., mouth 30 mm. wide, with corks to fit, gross	1	100 c.c. in 1	2
Pipettes, 1 c.c. in 1/10ths	3	250 c.c. in 2	2
Pipettes, measuring, Mohr, 10 c.c. in 1/10ths	2	500 c.c. in 5	2
Burette, 50 c.c. in 1/10ths, with straight glass cock	1	1,000 c.c. in 10	2
Burette support, with clamp	1	Filter pump, 7 inch, with coupling to fit standard thread faucet	1
Dishes, porcelain, with spout, 80 mm. diameter	3	Forceps, cover glass, brass, 120 mm.	1
Burners, Bunsen	2	Forceps, mouse tooth, 150 mm.	1
Tubes, centrifuge, ungraduated 15 c.c.	72	Scissors, dissecting, one sharp and one blunt point, 140 mm.	1
Tubes, test, chemical, 150 by 16 mm.	200	Bone saw, 200 mm. blade	1
Tubes, test, chemical, 150 by 20 mm.	100	Scalpel, dissecting, set of 2	1
Vials, specimen, with cork stopper, "shell," 80 by 25 mm.	144	Shears, cartilage 230 mm., 60 mm. blades	1
Test tube support, beechwood, oil finish, 12 holes in single row	6	Brain knife	1
Bottles, reagent, with square glass ground stopper, 250 c.c. blank, narrow mouth	24	Clamps, artery, long straight	2
Bottles, 1 gallon	6	Chisel, 1/2 inch at end	1
Balance, trip, with agate bearings	1	Chisel, 2 inch at side	1
Balance weights, brass, 1 gm. to 500 gm.	1	Hammer, metal, with curved hook at end of handle	1
Centrifuge, on floor base, integral unit with rheostat, combination 8-place head, four 15 c.c. and four 50 c.c., trunion rings and cups, size 1 with motor corresponding to current available	1	Adhesive plaster, large roll	1
Funnels, glass, 3 inch diameter	3	Applicators, wood, pkg. of 1,000	1
Funnels, glass, 4 1/2 inch diameter	2	Colorimeter	1
Paper, filter, 150 mm. pk. of 100	6	Centrifuge tubes, 15 c.c. in 1/10ths	6
Paper, filter, 200 mm. pk. of 100	2	Flasks, volumetric:	
Funnel support, wood, for 2 funnels, one on each side	1	25 c.c.	2
Flasks:		50 c.c.	2
50 c.c.	6	1,000 c.c.	1
250 c.c.	6	Micro burner	1
1,000 c.c.	3	Fire extinguisher, 1 1/2 quart	1
Beakers, low form with spout:		Balance, analytical	1
100 c.c.	4	Balance, weights, gold plated, A. H. T. double checked set of 1 gm. to 50 gm.	1
250 c.c.	4	Chemicals:	
600 c.c.	2	Acid, hydrochloric, lbs.	6
1,000 c.c.	2	Acid, sulphuric, lbs.	9
Flasks, flat bottom, vial mouth:		Acid, nitric, lbs.	7
100 c.c.	10	Acid, acetic glacial, lb.	1
300 c.c.	2	Acid, carbolic, lb.	1
500 c.c.	1	Acid, benzoic, ozs.	4
2,000 c.c.	1	Acid, tartaric, lb.	1
Clamp, test tube, 6 inch	1	Acid, molybdic, ozs.	4
Pipettes, Folin-Wu, 15 c.c.	24	Acid, phosphoric, lbs.	5
Sugar tubes, Folin-Wu	6	Acid, picric, lb.	1
Digestion tubes, Folin-Wu, grad. into 50 and 35 c.c.	2	Acid, lactic, lb.	1
Water bath, copper, tin lined, with steam escape, cover, concentric rings, perforated plate and tripod, 8 in.	1	Acid, uric, gm.	1
Water bath, copper, tin lined, with test tube rack, 6 by 7 inches	1	Potassium bichromate, technical, lbs.	5
CO ₂ apparatus complete with support, 250 c.c. separatory funnel, two 1 c.c. Ostwald-Folin pipettes and 3 lbs. metallic mercury	1	Alcohol, ethyl, 95 per cent, gal.	1
Gauze squares, wire, with asbestos center, 6 inch	4	Alcohol, methyl, lb.	1
Bottles, dropping, with ground-in pipette and rubber bulb, 60 c.c.	10	Alcohol, amyl, ozs.	4
Cylinders, measuring, with spout:		Ether, sulphuric, U. S. P., lbs.	5
10 c.c. in 1/10ths	2	Iodine crystals, resublimed, ozs.	4
25 c.c. in 1/2	2	Ammonium hydroxide, 28 per cent, lbs.	4
		Sodium nitroprusside, ozs.	4
		Ferric chloride, lb.	1
		Chloroform, U. S. P., lbs.	5
		Phenolsulphonethalein ampoules, box of 10	1
		Cedar oil, ozs.	4
		Sodium chloride, lbs.	5
		Sodium citrate, lbs.	5
		Sodium carbonate anhydrous, lbs.	5
		Copper sulphate, lb.	1
		Copper sulphate, lb.	1
		Potassium sulphocyanide, lb.	1
		Potassium ferrocyanide, lb.	1
		Glucose, anhydrous, oz.	1
		Xylol, lb.	1

2	Sodium tungstate, lb.	1
2	Sodium hydrate sticks, lbs.	5
2	Potassium iodide, ozs.	4
2	Ammonium sulphate, lb.	1
2	Sodium pyrophosphate, ozs.	4
	Urease tablets, 25 mg. tabs.	100
1	Creatinine, Pfanstiehl, gm.	1
1	Silver lactate, oz.	1
1	Sodium cyanide, lb.	1
	Sodium sulphite, lb.	1
1	Lithium carbonate, ozs.	4
1	Silver nitrate, oz.	1
1	Ferric ammonium sulphate, lb.	1
1	Aniline oil, ozs.	8
	Gentian violet, gm.	10
1	Safranin, gm.	10
2	Fuchsin, basic, gm.	10
1	Wright stain, gm.	10
1	Book: Stitt, E. R., Practical Bacteriology, Blood Work and Animal Parasitology, P. Blakiston and Son, Philadelphia	1
1	Biologic preparations: The preparations listed here should be under control of the laboratory in order to assure a constant, adequate supply, proper refrigeration and fresh products within the date period of specified potency.	
2	Tetanus antitoxin	100,000 units
2	Diphtheria antitoxin ...	100,000 units
1	Cowpox vaccine	100 inoculations
1	TAT for diphtheria im- munization	200 immunizations
1	Diphtheria toxin for Schick test	100 tests
6	Toxin for Dick test	50 tests
9	Old tuberculin	100 tests
7	Antimeningococcus ser- um	300 c.c.
1	Antistreptococcus serum	200 c.c.
1	Triple typhoid vaccine .	15 inoculations
4	Diagnostic antipneumo- coccus serums 1, 2, 3 .	20 c.c. each
1	Procedures to be carried out by the resident technician consist of the following:	
1	Bacteriologic, general (diphtheria cultures, smears for tubercle bacilli, gonococci, men- ingococci).	
5	Basal metabolic estimation.	
1	Blood (bleeding time, chemistry, coagulation time, count, culture, fragility test, iso- agglutination tests, icteric index, platelet count, vein puncture).	
4	Feces (morphology and blood).	
4	Gastric contents.	
1	Spinal fluid (cystology, globulin, sugar, smear for organisms).	
5	Sputum (simple routine, tubercle bacilli, pneu- mococcus typing).	
1	Urine routine.	
5	Miscellaneous (Dick, Schick and Pirquet tests, PSP, glucose tolerance).	

It is assumed that the pathologist's laboratory is well organized and completely equipped to cover every procedure in the field of laboratory diagnosis. Besides keeping a close supervision over the work of the hospital technician, the

pathologist is to act as a consultant in laboratory studies of obscure cases. Presence at the monthly staff meeting and a periodic check up of operating room sterility (sterilizer, solutions, etc.) are among the duties of the attending pathologist.

The procedures to be delegated to the pathologist are: blood tests including complement fixation tests for syphilis, gonorrhea, tuberculosis and bacterial antigen, the Kahn test, malarial plasmodia, the preparation of serums for blood grouping and the Widal test; bacteriological studies of feces; general bacteriological studies which include autogenous vaccines, identification of organisms by culture, examination for spirochetes, spinal fluid (culture, Wassermann, Kahn tests, colloidal gold), sputum (check pneumococcus typing) and tissues (section and diagnosis); miscellaneous tests including operating room sterility tests, detection of poisons, phenoltetrachlorophthalein test and guinea pig inoculation; special procedures (where a trained operator is not available) including blood transfusion, lumbar puncture and frozen section.

Estimating the Costs

The method chosen for the transmission of specimens will be governed by the location of a given hospital. When great distances are involved, the use of air mail and telegraph is indicated in an emergency. Otherwise parcel post or express will be the selected mode of transportation.

Cost of primary equipment: This estimate is based upon the current prices (New York or Philadelphia) of new materials purchased from a high grade supply house and upon the cost of labor in New York City. For the items specified under primary equipment a conservative estimate of the cost is \$2,000.

Replacements: The average cost of yearly replacements should not exceed \$300. This includes broken glassware, repairs and replenishment of used up material.

Salaries: The average salary of a capable technical assistant under the plan outlined would approximate \$1,200 a year with room and board. Compensation for the services of a pathologist and his laboratory would vary according to the size and location of a given hospital. Tentative figures would be: for a thirty-bed general hospital, \$2,400 a year; for a fifty-bed general hospital, \$3,600 a year and for a seventy-five bed general hospital, \$4,800 a year.

The sources of reimbursement to the hospital are the fees derived from hospitalized patients and ambulatory patients referred by physicians

of the town and near-by communities. In addition, if the laboratory carries on public health work as it would in a community without board of health laboratory facilities, a yearly grant may be obtained (New York State). This arrangement is generally welcomed by physicians in towns that lack adequate laboratory facilities and this holds true for most of our smaller communities. In the case of the hospitalized patient a flat fee may be charged for all laboratory procedures. This arrangement, however, works an injustice to the patient who requires little or no laboratory work and militates most maliciously against the laboratory finances in the case of one who requires many examinations. It is probably best to make a pro rata charge for each test within the means of a given patient. Thus, three classes of fees, A, B and C, might be arranged according to the financial status of the patient.

The plan that has been proposed here is adaptable to changing conditions. Hospital laboratory facilities are simply augmented as the need arises. Large endowed Class A hospitals are generally in a position to pay for a Class A laboratory. The small hospital organization, however, is generally at a loss to meet such an obligation. Under the proposed plan, however, it may be possible not only to render an important service to the community but also to place the laboratory on a self-supporting basis.

How One Hospital Is Satisfying Its Patients

In response to the editorial in the April issue of THE MODERN HOSPITAL on "Satisfying the Patient," Dr. Frank Deacon, president, Jackson Park Hospital, Chicago, described the way in which Jackson Park Hospital has solved the problem. The problem, says Doctor Deacon, was solved at that hospital as early as May, 1929.

He continues:

"The morning temperature taking begins at 7 o'clock. This action was taken after we had received numerous reports of dissatisfaction caused by the senseless awaking of the patient early in the morning regardless of his condition. Under our present arrangement, we obviate the taking of temperatures by the night nurses by having the day nursing force take the temperature at 6:30 p.m. and after 7:00 a.m., the advantage being that the patient is allowed to sleep on in the early morning unless there is occasion for taking the temperature in specific cases, or on direct orders from the attending physician. By the discontinuance of the routine taking of temperatures by the night floor nurses, the patient has his evening free to converse with visitors. We are glad to report that this arrangement has been entirely satisfactory, and we have had no complaints from the patient, the doctor or anybody else concerning the manner in which this procedure has been worked out.

"In reference to the problem of serving 'cold meals,'

we are also glad to report that this problem no longer exists in this hospital. We believe that it is due to the fact that we serve all meals from steam tables in the diet kitchens on each floor and we do not try to serve meals from the general kitchen which, in accordance with the usual custom is in the basement. The decentralizing of meal service in this way has been argued against incessantly for the alleged reason that the diet kitchen on each floor means more expense for various causes, but we are inclined to doubt the virtue of this objection. If, for the sake of argument, we were to admit the truth of such a statement, it would seem to be poor economy on the part of the hospital to fail to provide hot meals for the patient. The advantage of such service cannot be offset by the disadvantages of the possible spending of a little extra money in the furtherance of the satisfactory serving of hot meals.

"We agree with what you say about explaining the charges to the patient when he enters the institution. Certainly if the patient or relative is presented with a bill at the time of entry, as should be the rule in any well regulated hospital, there would be no grounds to claim a lack of knowledge of such charges. This ground for complaint prevails, however, after the patient arrives in the hospital and has added charges or entries made to the bill for extra services or other things received such as medicine and dressings. Since no bill is ordinarily rendered at the time the extra service is supplied, we believe that the patient sometimes takes advantage of the fact that he has not been made acquainted with the charges to start a discussion over the payment of the bill. In many cases he may try to evade payment of the claim on the plea that he did not receive the things that had been charged to him during his stay in the hospital. This attitude on the part of some patients seems to be one that no other business or institution, other than hospitals, has to combat to the same extent. We do not believe that the average hotel has as much trouble with its guests in claiming that services are charged that have not been rendered or that the charges made are excessive.

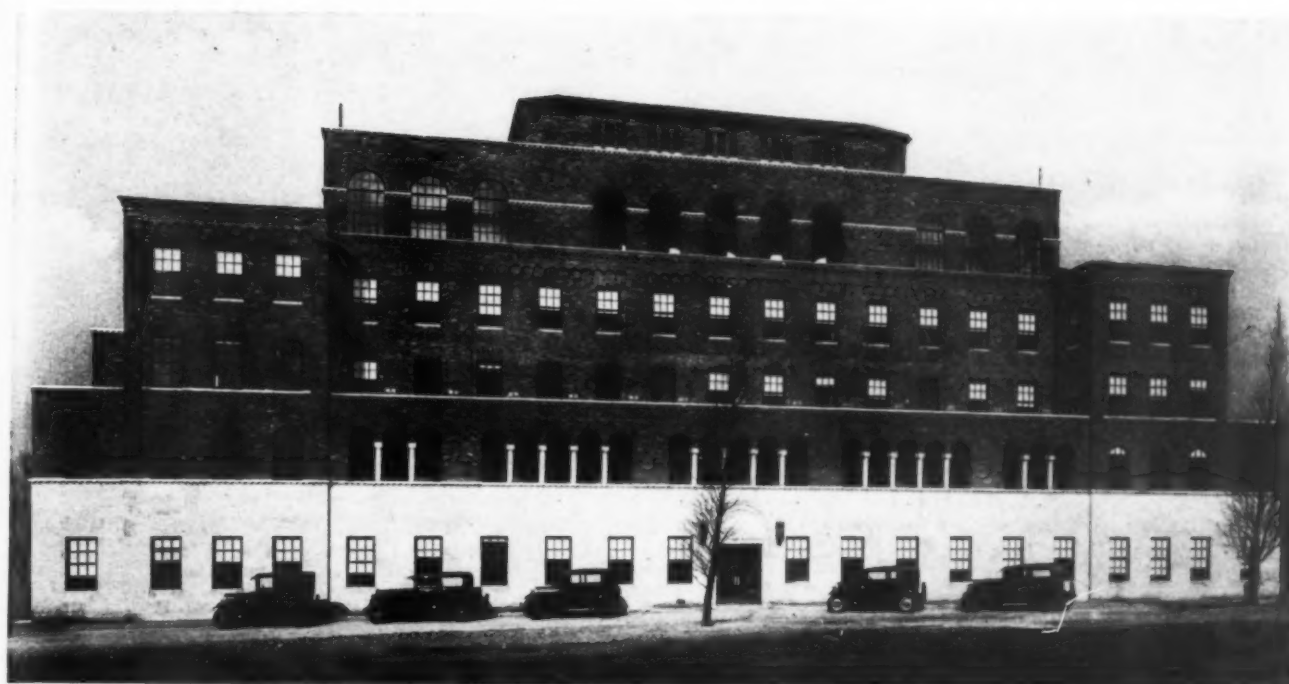
"We are at present contemplating putting into operation a plan that may obviate a great deal of this continual complaining that charges made to them after admission are unreasonable, inconvenient, unnecessary and inconsiderate."

How Hospital Rates Have Increased in Canada

Hospital rates in Canada are approximately 90 per cent higher than the 1913 levels, and almost 5 per cent higher than in 1926, a recently completed survey by the Dominion Bureau of Statistics shows. Hospital rates, unlike commodity prices, have shown a steady advance. Between 1913 and 1926, maintenance costs advanced more rapidly than charges to patients, but since 1926 the reverse has been true.

The following table shows the average per capita, per diem charges and maintenance costs in the three years chosen by the bureau as a basis of comparison:

	1913	1926	1928
Private wards	\$2.68	\$5.07	\$5.25
Semiprivate wards	1.57	2.32	2.85
Public wards	1.02	1.83	1.96
Operating room charges.	5.16	8.17	8.36
Maintenance costs	1.68	3.48	3.45



Another Gain Made in Pittsburgh's War Against Tuberculosis

By C. HOWARD MARCY, M.D.

Medical Director, Tuberculosis League of Pittsburgh

CONSERVATION is the latest and most persistent note struck by modernity, and every enterprise in our modern system has succumbed to its clarifying force.

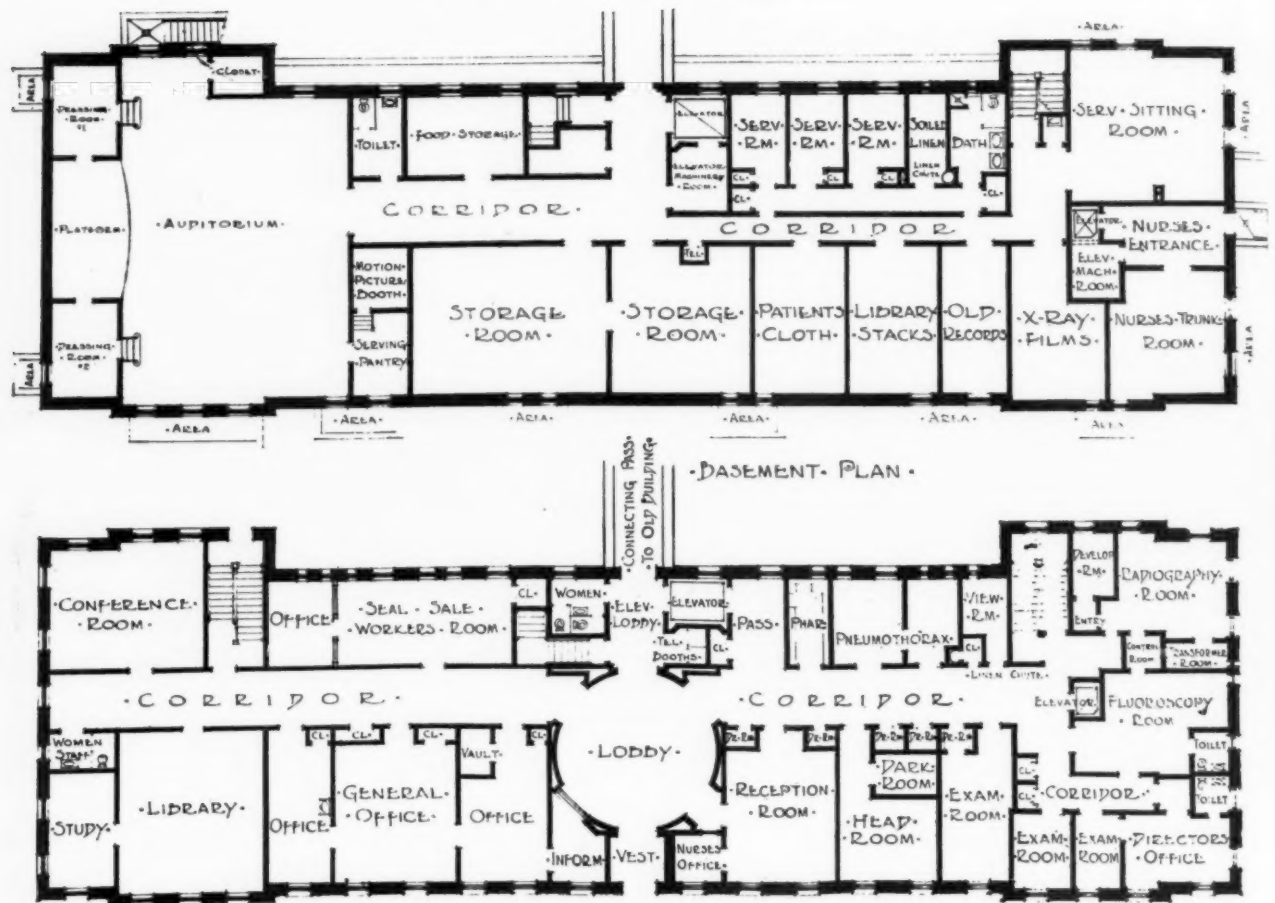
Behind the sweeping elimination of waste in labor, material, money and man power is this steady driving pressure, creating drastic changes in time-honored systems in the mechanical, industrial and educational institutions of to-day. The modern hospital likewise marches to its dynamic beat. It steps side by side with big business in conducting its affairs, be they administrative or medical.

During the past twenty-two years the Tuberculosis League of Pittsburgh, under the guidance of a board of directors familiar with the trend of social, industrial and scientific endeavor, has centered its activities on the tuberculosis problem in a large industrial district. Departing from the usual practice of establishing its base far distant from the source of patients, it has developed an organization whose many ramifications are coordinated and guided from one point in the midst of a population of 1,500,000.

In the headquarters of the Tuberculosis League

is centered every activity of this educational and curative agency, organized to operate with a minimum expenditure of time and money. The hospital, the out-patient department, the open air school, the Christmas seal offices, the undergraduate school for nurses and medical students, the educational department and the library are all grouped under single control.

The physical equipment which comprises a total of nine buildings and represents a capital investment of \$1,250,000 is owned and operated by the league. The last unit, which is the main building, was opened this year, and is a fitting monument to the work represented. This structure of brick and stone, designed by E. P. Mellon, architect, and his associate W. L. Smith, New York City, in cooperation with T. B. Kidner, consultant, New York City, is purely Romanesque in architecture. It towers above the city and may be seen for miles around. From a distance it has all the appearances of a fortress holding the defense of a community within its stronghold. This is actually what it does. Located 1,100 feet above sea level, only one mile from the busy heart of a great city, yet having desirable isolation, it



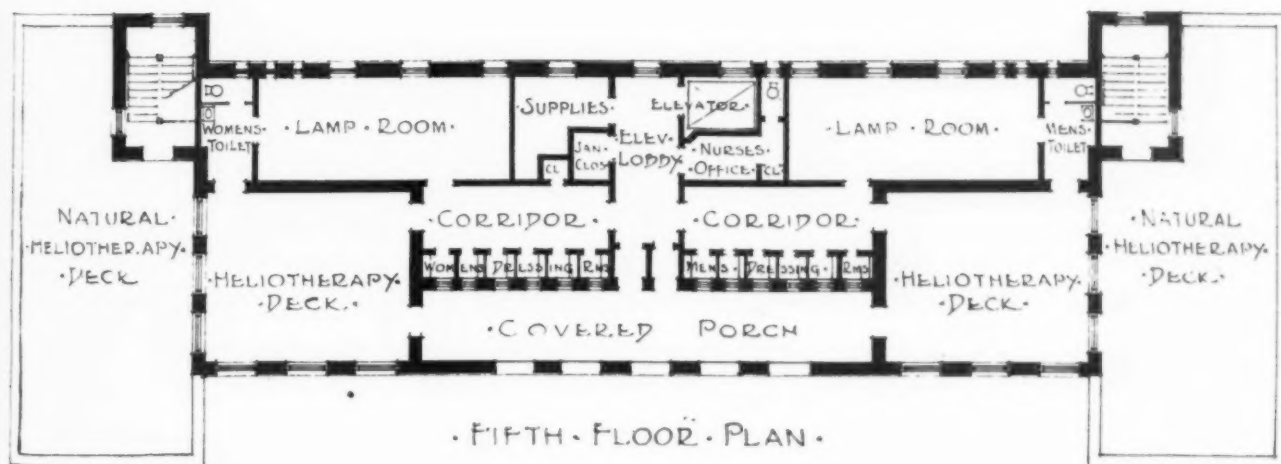
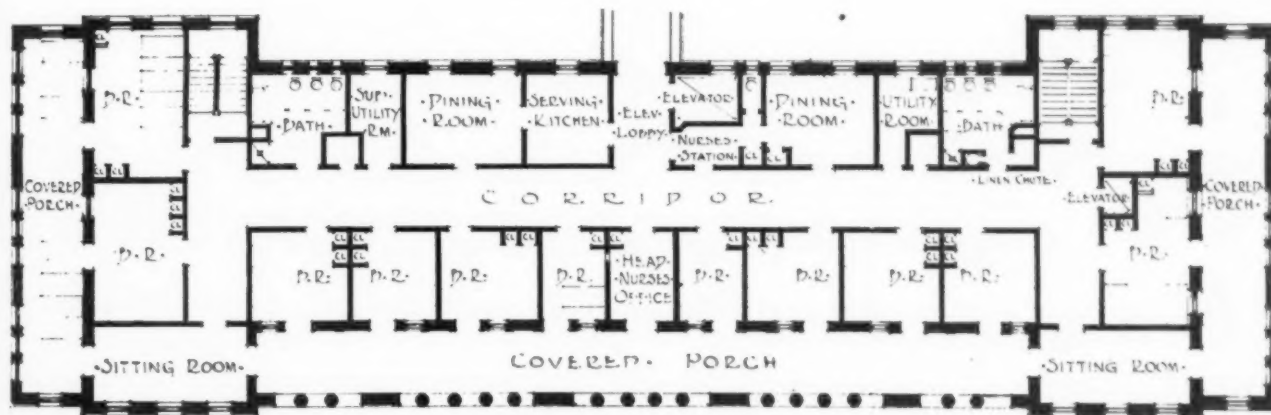
FIRST FLOOR PLAN

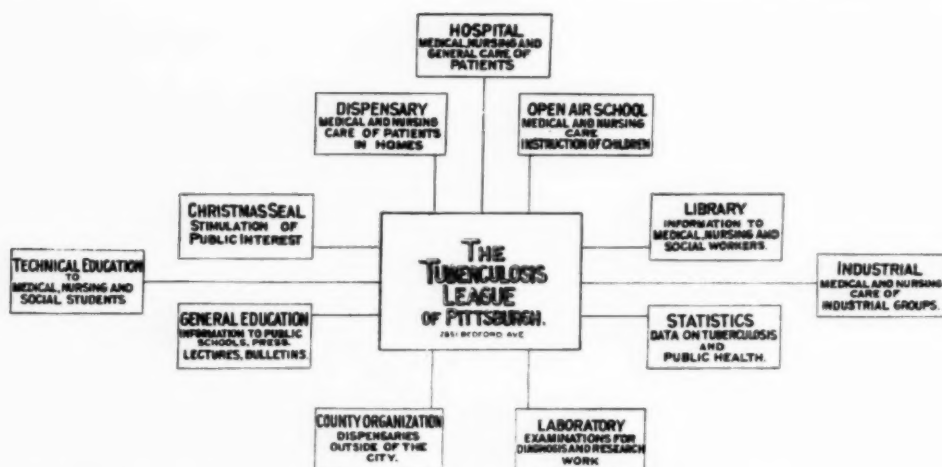
The plans show the arrangement of the first floor and basement of the Tuberculosis League Hospital. Below is pictured the spacious, circular shaped lobby.





Sun colored walls, gray woodwork and terra cotta hangings contribute to the general air of comfort that pervades the reception room. The general arrangement of the building is shown in the plans of the second and fifth floors, reproduced here.





The functions of the Tuberculosis League of Pittsburgh are manifold, as the chart shows.

has an advantage unique perhaps in the field of tuberculosis prevention. Great care has been taken both in the architectural appearance and in the interior decorations to dispel that inherent fear of tuberculosis institutions that unfortunately still exists in the minds of many.

On entering the new main hospital building, one steps into a wide circular shaped hall, more like a well furnished, well ordered hotel than a hospital. This is emphasized by the absence of the usual bleak whiteness associated with hospitals. The walls are of a sun color; the woodwork is a soft battleship gray. Huge red morocco couches on either side of the hall follow the line of the walls.

In the general reception room to the right of the main lobby is the same air of comfort. Here again are the sun colored walls and the gray wood. Terra cotta hangings are used, and their color is repeated in the tones of the rug and of the chair coverings. Reading lamps on convenient tables, well selected books and pictures and easy chairs produce an atmosphere of relaxation.

The administration section to the left includes the conference room which is also done in the prevailing colors. The Christmas Seal offices occupy a large part of this wing. There is plenty of space to carry on the work of the department.

The library opposite is unusually attractive and contains more than 25,000 volumes. This scientific and public health library is in charge of a full-time librarian, whose services are available not only to the staff, but to all others interested in public health work. A fiction and vocational library is also available for the use of patients. The librarian, by constant contact with the patients, provides them with material of special interest in their various occupations.

The offices of the general superintendent, the record rooms and the bookkeeping office are in-

cluded in this wing immediately to the left of the main lobby. The medical department is situated to the right of the central hall. Offices of the medical director, the examining rooms, the x-ray department, the operating rooms and the pharmacy, conveniently grouped, are provided with every facility for the examination and study of patients.

The second, third and fourth floors are given over to private rooms and wards, the largest ward containing three beds. Every room has hot and cold running water, radio and telephone service. The rooms and wards all open on outdoor porches. Color, charm and beauty have been considered in the furnishing of the bedrooms as well as in the public rooms on the lower floor. Soft toned rugs, cheerful hangings, easy chairs, tables with lamps and books conveniently placed deepen the impression of a modern, well ordered hotel.

It is a well known fact that to care for the body and to ignore the claims of the mind of a patient is to block a cure, and so homesickness which has been a contributing cause of many failures in the cure of tuberculosis is treated as an important symptom. The telephone at the bedside may quickly bring the voice of a loved one at home. To a mother taken from her children is given the luxury of frequently hearing their voices and at the same time giving to them the assurance that she is not so far away. The child patient may know without any effort just what is going on at home. The familiar voices help much toward ameliorating those first pangs of separation. Here a patient is not just a menace removed from society to protect his kind; he is a human being whose life, health and happiness are of paramount importance.

The units for ambulatory patients; the kitchens; the general dining room; the laundry; the power house; the pathological, bacteriological and chemical laboratories; the open air school; the service building and the out-patient department are grouped around the main hospital building.

The institution's organization and its convenient location make it truly a community center where, in cooperation with other agencies, much may be accomplished with a minimum of waste in time and expense.

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The medical department is situated to the right of the central hall. Offices of the medical director, the examining rooms, the x-ray department, the operating rooms and the pharmacy, conveniently grouped, are provided with every facility for the examination and study of patients.

The second, third and fourth floors are given

How Organized Medical Service May Reduce Costs*

By FRANK D. LOOMIS

Secretary, Chicago Community Trust

THE cost of illness is determined by the cost of the various elements that enter into it. In the rural home of a few years ago, before the coming of the automobile the family was isolated. The rural neighborhood was largely dependent upon its own resources. If illness came the family doctor was called. He knew the family well. His charges were small and were based upon the family circumstances. There was no other obvious expense. Even the family income suffered no loss. Neighbors shared the inconvenience and extra work and were repaid in kind. There was little occasion for public discussion of the cost of illness.

What Is Included in Cost

To-day we live in a different world. The cost of illness is the sum total of many items. There is the public cost of prevention and sanitation and other forms of public health work, which add definitely and considerably to the tax bill that each family must pay. There is the economic cost in the business world, affecting both employer and employee, the cost of decreased efficiency and decreased earning power, even for those who are not sick, and immediately reduced income, continued perhaps over a long period of time, for the family in which the illness occurs. There is the social cost of disturbed family and neighborhood relations, extending possibly even to the point where the sick family becomes a community liability, a social burden to be supported by charity. Finally, there is the personal cost, especially the cost of medical care which includes the service of the family doctor or of one or many specialists, and added to these are the fees of the hospital, the laboratory, the clinic, the operating room, the nurse, the ambulance, the drug store, the special appliance shop, the convalescent home and the money paid for extra help in the household. Few people know in advance how many such expenses there will be, how much they will cost or how or when they will be met.

The cost of medical care to-day is the cost, in a

large measure, of new services. Add the cost of a good deal of confusion, for the rapid development of new institutions and new factors in the situation and the rapid growth in scientific knowledge and resulting changes in methods of practice have created problems of adjustment and organization that have been only partially solved. This confusion itself adds greatly to the cost of illness, for it must be evident to all that modern facilities and services, expensive as they are, could be supplied at considerably less cost if they could be utilized continuously at reasonable capacity and adapted to the abilities of various classes of patients to pay for them as they use them. Organization is the key to the solution of the present high cost of illness.

The idea of the organization of medical service is not everywhere popular. The private physician, especially, objects to it. And from his traditional standpoint, he may well object. He is afraid of state medicine. State medicine is spreading in some European countries, but it is not likely to make any great headway here. The temper and tastes of our people do not lend themselves to that kind of development. However, we are rapidly departing from pure individualism. We are, in this country, organizers, and organization will find its way into medicine as into other forms of professional, social and business life. It will find its way, with the doctor at the head of it. The doctor will continue to be, as he has always been, the most important and the leading factor in the prevention, care and cure of illness. His leadership and his scientific skill were never more accepted and never more relied upon than they are to-day.

How Group Medicine Started

Louis Pasteur, who less than a hundred years ago discovered the causes of fermentation and decomposition and their prevention, the basic discoveries in modern sanitation and bacteriology, was the father of modern medicine. His discoveries and others that followed indicated the advantages of centralized practice. Thus came the modern hospital, the modern clinic, the modern laboratory, the specialist, the medical attendant, the intern,

*Read at the joint meeting of the Illinois, Indiana and Wisconsin Hospital Associations, Chicago, February 20, 1930.

the graduate nurse, many improved facilities for medical education. The rapid march of progress in discovery and invention, experience in the use of appliances and necessary economy of investment and effort have led more and more inevitably toward the practice of group medicine in centralized institutions.

At first the hospital was not popular. It had in the past been merely an infirmary for care of the sick poor. It was regarded with suspicion and dread. People went to the hospital, it was supposed, only to die. Under the new science, however, the situation changed. People of wealth, in touch with eminent physicians and surgeons, began to see the advantages of institutional service and they could afford to pay for it. Wings or new building units with private rooms were added to older hospital ward buildings, and here the wealthy were cared for.

This double service, in large wards or in private rooms, provided well for the rich or the very poor. The poor often had the better part of it, for life in the open ward was interesting and the service was equally efficient. Life in the private room might be lonesome. Both groups, however, benefited immensely from the service.

Then the hospitals became popular. The doctors found it convenient to bring patients there. The middle class man wanted the advantages of hospital care. He still retained his prejudice against the open ward. That was for the very poor and to use it would hurt his dignity. He wanted the private room with all its collateral and special service even though he could not afford to pay for it.

Small Wards One Solution

There were two difficulties in this situation, first, the cost and second, the wide fluctuation in demand for hospital beds. Illness is not evenly spread over the entire year. It comes in peak loads, and corresponding depressions occur in the morbidity curve. There were evidences that the hospital was becoming too popular. For if sufficient hospital buildings and beds must be provided to care for all who are sick at the time when the greatest number are sick, then these buildings and beds will be only partially occupied much of the time. Yet the overhead is constant and hospital staffs are not quickly readjusted.

Now the question is, how can we make modern medical service more economical and more efficient, or how can we bring within the means of the average man the reasonable service that he needs? This cannot be done by any return to purely individual medical practice.

One direction in which improvement is being

made is in the development of small wards and semiprivate hospital rooms. Beds in these rooms or wards and the service collateral thereto can be maintained at considerably less cost than in exclusive private rooms.

Still another means of reducing hospital costs for the individual patient may be found in popularizing the use of beds in large open wards. Some such wards should be reserved wholly for the use of patients who pay for them. It should be understood that the service in these wards is as good and as wholesome as service in the private room, and for the average patient who has passed the serious stage of an illness such service may be much better. Well directed publicity campaigns, with popular magazine and newspaper stories, might quickly bring about marked changes in public sentiment in this matter. The use of such wards by well-to-do patients would also have effect.

Fitting the Bill to the Service

Such measures would make possible a reduction in the bill that the patient or his family must pay for hospital service. But to be fully effective, these reductions must be accompanied by similar reductions in all the bills relating to an illness—the charge for nursing, for operating room and special treatment, for the doctor's care. In other words, the kind of bed the patient occupies should determine approximately the rate that the patient will pay for the total service. The aggregate bill should be graduated according to the elegance of the service that the patient enjoys. Experiments in such adjustment of charges are now being conducted.

It seems but a step beyond this to measures that may make more certain and more convenient the payment of the patient's aggregate bill. Forms of insurance are possible. Installment payments may be arranged. Collection may be made through a central agency. Payment by any method is facilitated when the bill is regarded as one bill. The troublesome matter of finances as between the patient and the service rendered might be greatly simplified and the whole situation vastly improved if the entire function of fixing the amount of the bill, determining the method of payment and securing performance thereof were definitely and completely separated from the purely professional functions of medical practice.

The value of medical service may be highly intangible. Who knows, who can tell how much it is worth to save a life? The highest values in all things and all services are sentimental. How little may be the actual cost of a great painting, but how much may be its value! So it is with the

finest medical service. It is priceless. Yet there is a residual basis of cost that may be fairly ascertained. We can tell how much it costs to maintain a hospital bed. We know the cost of medicine, food, the laboratory and the x-ray apparatus. We know exactly what it costs to supply a nurse. It is possible also to determine the marketable value or cost of an hour's service on the part of a physician. This cost somebody must pay. Perhaps it is all that the average man can pay. He ought to pay that.

Where will such payments be made? Who will make the collections and distribute the proceeds among the proper parties?

The Hospital as Accountant

Will the hospital be used for this service? The large hospitals have well equipped auditing and clerical departments. They have social service departments that may be called upon to determine the amount any patient may reasonably pay. They have endowments, which are growing and which will continue to grow, and these might conceivably be applied toward payment of the minimum cost of all items of the bill, including the service of the physician. Surpluses or profits in one department may be used to cover deficits or cost of charitable service in another.

Machinery set up in connection with any clinic, medical center or center for group practice, incorporated or unincorporated, for profit or not for profit, may be similarly used. None of these possibilities is far removed from the experience of institutions already operating successfully.

It is not inconceivable that the general hospital of the future will have three classes of patients instead of two: those who pay nothing at all, receiving both hospital service and medical service of every kind without charge; those who come to the hospital through private arrangements with their own physicians, occupying private rooms and paying large fees for every kind of service received, and third, that other class for whom adequate provision is not now made, the man of small means who is able to pay only a small fee. He may make his arrangements directly with the hospital, his fee may be fixed at an amount that he can afford to pay, a fee on the average large enough to cover the cost of the service, the hospital may assume responsibility for the collection and all items of the service may be paid for by the hospital.

Objections may quickly be raised against any such plan. It may be said that the hospital is having enough trouble now collecting for its own service. Why should it add to this difficulty by attempting to collect for other services also? And,

more especially, how can it possibly add to its present heavy financial load by taking on other large obligations? But it is undeniable that the present system of many bills from many parties for services having to do with one illness is uneconomic and wasteful. Payments may be unequally and unjustly distributed. Many payments that ought to be made, even by people of moderate means and sometimes by others, are not made at all and the various parties to the service lose everything. The compensating policy so often followed by doctors and sometimes by hospitals, of overcharging the generous or the wealthy patients to make up the losses from patients who ought to pay and do not, is also uneconomic and unjust. It may even be disastrous, for it cultivates in the public mind the idea that all medical charges are whimsical or capricious and that the patient likewise may pay what he likes. The selfish or irresponsible patient may pay only what he is obliged to pay—the drug store, the appliance shop, even the nurse—and leave the doctor and the hospital in the lurch. Both the hospital and the doctor would be better off if they were to get something and could be reasonably sure of getting it.

Regularity and certainty of collection would affect the mind and habits of the patient in another way. Knowing that he would have to pay, he would be more reasonable and more moderate at the time of making his contract for medical services.

Demand for Beds Fluctuates

Fluctuation in the need for hospital service is another matter. This fluctuation is due not only to seasonal rise and fall in the amount of illness but to great changes in the types of service required from week to week and day to day. The hospital is often compared to the hotel. Unlike the hotel it cannot cater to conventions so that it will be occupied during dull seasons. It may be like the hotel in being subject at times to unreasonable competition. This difficulty will not be solved by the endless building of new hospital organizations all designed to capture the profitable private patient. Hospitals and doctors should put their heads together to make the low priced patient profitable.

The problem of fluctuation is difficult. May not an important contribution toward solution of this lie in the larger development of out-patient departments, clinics, medical centers affiliated or working in close cooperation with the hospital? Such centers make available the advantages of modern and expensive equipment without the use of hospital beds. Not all sick people need to be

kept in bed. Not all bedfast patients require hospitalization. A hospital bed may be desirable in many cases; it may be preferable but it is not essential. Herein lies an opportunity to equalize or adjust the use of hospital beds. Outside service, in clinics or even in the home, is being developed by some hospitals. There seems to be opportunities for much extension of services along these lines.

How a Pay Clinic Helps

This brings up the question of the pay clinic. The clinic, or out-patient department like the old fashioned hospital has been regarded as an institution existing wholly for the benefit of the poor. The poor have benefited greatly from it. Why should not its advantages be extended to those who are able to pay? Should they not come? Should they not pay? Should not the doctors in attendance at the clinic be paid? Should not the clinic, philanthropic or private, like the hospital, be maintained largely or wholly on a self-supporting or profitable basis? This also is being done.

Developments of this kind meet with opposition, particularly when the clinic comes close home or when it attempts to treat diseases that have been regarded as the exclusive prerogative of the private practitioner. There may be abuses that should be corrected. Progress comes by experimentation. It comes gradually, generally by evolution, not by revolution. But it comes. And there are reasons to believe that in the not distant future neighborhood medical practice in this country will be centered largely in these pay clinics. Why should not the qualified doctors of any neighborhood work through a central clinic, each devoting himself to the kind of practice for which he is best qualified.

Organized group practice of medicine, in hospitals, in clinics and in health or medical centers, seems inevitable. It will extend the service of the medical genius or the man of broad capacity, medical learning and experience; it will afford to thousands of men of more modest ability, who possess qualities of leadership, character and skill, ample opportunities to serve in soul satisfying ways and with assurance of adequate remuneration; it will extend medical research and education; it will relay to the intern and the nurse the many purely routine phases of practice; it will greatly increase the number of people who will have the benefits of good and timely medical care at a price that they can and will more readily pay; it will afford to the patient and to the practitioner a more efficient and a more economical medical service than has yet been offered anywhere in the world.

"Ways to Help the Hospital"—A Page From a Report

"Ways to Help the Hospital" is the caption of a page in the annual report of the Memorial Hospital, Worcester, Mass., which offers suggestions for potential donors to the hospital who are able to help substantially as well as for those who cannot give so liberally.

These "Ways to Help the Hospital" are listed as follows:

1. Establishing a department of physiotherapy.
2. Establishing a fund to supply special nursing for needy patients.
3. Building a house for maids.
4. Building a new administration building.
5. Supporting a social work for one year, \$1,200.
6. Contributing to a fund for supporting the social service department.
7. Contributing to a training school fund—to be used in securing additional advantages for the nurses.
8. Establishing a scholarship, the income to be used to assist suitable graduates of the school in taking advanced postgraduate courses.
9. Establishing or contributing to a fund for the dental clinic.
10. Establishing a library fund.
11. Establishing a fund for pathological work.
12. Contributing sheets, draw sheets and pillow slips.
13. Contributing fruit, vegetables, jellies, preserves or any food supplies.
14. Joining the aid society.
15. Establishing a fund for the purchase of radium.

Good Will of Newspapers Is Valuable in the Hospital's Work

"Hospital executives should remember that the press is the medium through which both incidental and vital activities of their institutions are presented to the public and that cooperation with the newspaper reporter is an extremely important duty of hospital management," says Veronica Miller, superintendent, Henrotin Hospital, Chicago, in an interview given to *Hospital Topics and Buyer*.

"The hospital's relation with the local press is of supreme importance in creating and maintaining public confidence and good will in any community. Of course, problems differ with the individual hospital and with the community; yet a safe rule to follow is that the newspapers are interested in getting accurate and complete information on hospital and cases and policies—and in getting it rapidly.

"Lack of cooperation with the press only results in unfavorable publicity that often takes years to overcome. Furthermore, lack of good will with the press puts the hospital in a plight when comes the inevitable day when it must make a public appeal for funds or for a new building.

"When a superintendent is dealing with several newspapers it is to the best interests of the hospital that he give them all a square deal and not play favorites. Although when a big story breaks it is not considered ethical to send the same copy to two or more papers, yet the papers may be notified simultaneously that the story has broken. Generally they prefer to have the story written by their own representatives."

Bibliotherapy as an Aid in Treating Mental Cases

By G. O. IRELAND, M.D.

Neuropsychiatrist, U. S. Veterans' Hospital, American Lake, Wash.

SOME time ago a superintendent of a large institution was asked the name of his librarian. His reply was illuminating: "There is none at my hospital. In fact, I don't believe in libraries for neuropsychiatric hospitals." This was an arbitrary statement, but the doctor was not prepared to advance an adequate argument to sustain his contention.

Such a sweeping indictment of a recognized service seems unwarranted, as the usefulness of the library is acknowledged by those who devote their time to the study of psychiatry. Why should we not condemn the pharmacy or the hydrotherapy department? Time and experience have established both of these utilities as necessary adjuncts to the treatment of those who are suffering from some form of mental maladjustment. As advancement has been made in the study of

mental diseases, the psychiatrist has come to realize the value of books as an aid to the proper adjustment of patients and the library service deserves considerable study if it is to be raised from a field of empiricism and established on a rational basis. I believe that bibliography can be developed and that it should be accepted as a scientific adjunct to the treatment of mental diseases.

Since the World War the hospital library has developed by leaps and bounds, and the United States Veterans' Bureau, recognizing the importance of library service, insists upon a technical examination and considerable experience as qualifications for the position of librarian. To-day several universities prepare students for such positions. In addition to the essential requirements, it is suggested that the librarian in the



Library of the Royal Victoria Hospital, Montreal, showing the wagon and the box for returned books, as well as the shelves.

neuropsychiatric service have a knowledge of the mechanism and general symptomatology of the various psychoses and thus be prepared for many of the peculiarities that patients may display.

Much can be done to help the mentally ill if the physician and librarian will cooperate. If the physician desires to recommend or even to guide a course of reading, he will feel that his suggestions will be carried out intelligently, having abundant evidence that the library service is appreciated even in a hospital of this class.

Librarian Should Be a Woman

The position of librarian should be held by a woman. She must be intensely sympathetic and she must not voice ideas that may antagonize. She must be in touch with all topics of the day and be prepared to act as friend, adviser, counselor and guide. She must be interested in sports, ready to investigate any question, willing to give advice and not too decided in her opinions. Her assistance and advice in choosing the proper class of reading should be of great value, for psychiatric patients are different in character and behavior from the general run of persons encountered in a public library.

The ideal library obviously should not be an official part of the institution. Instead it should be informal and as much like home as possible. Pictures on the walls, flowers on the table desk, curtains at the windows, a rug and one or more big reading tables with easy chairs will do much to give a cozy and inviting general appearance. Moreover, there should be a full stock of standard books, fiction and nonfiction, journals, newspapers and magazines of the higher type. A bulletin board is a necessary adjunct, where notices of entertainment and of new books and the covers of new publications frequently attract attention and suggest a course of reading. A portable shelf, which can be rolled to a receiving ward or infirmary is a useful accessory.

The choice of books for such a library requires considerable thought and careful inspection. A seemingly harmless volume may express sentiments innocuous to the average reader but possessing alarming possibilities for the patients in an institution. For instance, "The House of Pride" by London is a harmless series of short stories, but "Koolau the Leper" begins thus: "Because we are sick they take away our liberty." Of course, this is taboo for obvious reasons. It might be dynamite to a paranoiac.

It is an interesting fact that in a hospital of 400 neuropsychiatric patients, 118 use the library service fairly regularly. The librarian must be familiar with normal reactions to impulse, re-

gardless of surroundings and teachings, and must realize the native ability of the individual to modify and control the ill effects of any maladjustment. Even in a neuropsychiatric hospital we have evidence that sometimes the library department is the "open sesame" that may dissipate the clouds that obstruct the vision of many patients.

Certain psychoses are characterized by seclusiveness and seeming inaccessibility but experience shows that the latter is merely apparent and not real. We know of many instances where a dormant association has been awakened by some unexpected incident and the patient has made an adjustment of varying permanence. Furthermore, experience shows us that frequently a train of associations is aroused by reading an article, the development of which may lead to activities of real importance. Is it not plausible to suppose that a similar reaction may result in the case of the psychotic patient whose sensorium is capable of only partially functioning? Certain drawings, pictures, or even written phrases may light up the consciousness which, in turn, awakens a desire for activity. We know that a good book is a boon to the person who is making a long and tedious journey or even to the man who dreads going to bed for fear he cannot sleep.

It must be remembered that in many instances we are confronted with an individual suddenly bereft of his lifelong allies, his special senses, on which he has always depended to interpret, advise and guide him, and he realizes vaguely that he cannot rely upon himself. He may be confused, not knowing where he is. Time and person are as nothing. Strange voices assail him and visions disturb him. He is obsessed by various ideas, false and utterly foreign to his accustomed trend. Values are distorted and any attempt to reason away these strange thoughts is futile. Frequently the patient has deteriorated and no longer does he react to ordinary stimuli.

Prescribing Suitable Books

Many of our patients are out of touch with their surroundings and their attention is difficult if not impossible to attract or to hold. We may be confronted with a man whose emotional reactions are out of proportion to the impulse that creates them. Often he is absolutely indifferent to what is going on about him. His judgment is not sound enough to apply correctly any information he may receive. He may be restless. Perhaps he will gain some relief from this tension in a few written words that awaken a train of thought and arouse an interest that may be the first step in the adjustment of a soul in torment.

If the self-centered, introspective individual who does no reading but sits about the ward doing nothing, concerned with his own thoughts only, in some way becomes interested and asks to go to the library and, if by a happy chance he obtains a book suited to him, much benefit may result. If the ward surgeon and the librarian cooperate, the patient's interest will be directed along proper channels.

As in other forms of therapy, the factors of incompatibility and contra-indication must be watched for in bibliotherapy. Drugs should not

be given indiscriminately. No sane man would prescribe strychnine in unlimited doses for insomnia. Then why books? One recalls "Beau Sabreur," by Percival C. Wren, with its descriptions of native atrocities, and Katherine Mayo's "Mother India," which has the same objectionable features. Of course, such books would be entirely out of place in the library of any neuropsychiatric hospital. Some works actually describe a mental state, such as the narcissism of the Archdeacon in "The Cathedral," by Hugh Walpole. Of course, books detailing homicidal, suicidal or nihilistic ideas should be avoided if the patients' delusional trend and general tendencies indicate them as indigestible literary food. On

no account should haphazard browsing be permitted except under close supervision. A paranoiac, always a potential murderer, may obtain a book on poisons or on electricity, thus aggravating his symptoms and adding fuel to the flame of his delusional system.

Sad books should not be given to a mournful or depressed patient. A hazardous type of book to be used indiscriminately would be one on religion. Books should not be sent to a patient indiscriminately. The very book that the physician has ordered to be denied the patient is fre-



Where patients at the Gillette State Hospital for Crippled Children, St. Paul, Minn., while away many pleasant hours.

quently purchased and sent to him by well meaning friends. Such books have to be confiscated.

One cannot afford to overlook a single chance to gain the interest of a patient and a request for library service must be answered even if the patient is unable to go himself to the library. The little cargo of books can be brought to him and he can choose for himself. Possibly he is a newcomer who, after spending countless hours in the dim recesses of delirium, gradually and painfully makes his first excursion into the world of reality.

Our knowledge of the mechanism of the human instincts should be of invaluable assistance to us in choosing the vehicle by which to administer

be given indiscriminately. No sane man would prescribe strychnine in unlimited doses for insomnia. Then why books? One recalls "Beau Sabreur," by Percival C. Wren, with its descriptions of native atrocities, and Katherine Mayo's "Mother India," which has the same objectionable features. Of course, such books would be entirely out of place in the library of any neuropsychiatric hospital. Some works actually describe a mental state, such as the narcissism of the Archdeacon in "The Cathedral," by Hugh Walpole. Of course, books detailing homicidal, suicidal or nihilistic ideas should be avoided if the patients' delusional trend and general tendencies indicate them as indigestible literary food. On

the doses of book therapy. In the case of each individual one should prepare a sort of work sheet, setting down his name, important points in the family history, home environment, personal history, schooling, opportunities for education, reasons for leaving school, tastes or dislikes, postwar activities, postwar adjustment, a short review of events leading up to hospitalization and

Patient's Name	Ward	Type
.....		
Memo from the librarian to Dr.....		
Kindly suggest the type of books and magazines suitable for this patient's reading. Scientific, religious, practical arts (wood-working, gardening), travel, history, literature (plays, poetry), textbooks (grammars, arithmetic), fiction, exciting or serious.		
Type to be avoided.....		
Signed....., Librarian		
....., Ward Surgeon		

present condition and complaint. Thus we may offer books designed to awaken old interests by association.

A thorough study should be made of the intellectual activity of the patient, his ability to acquire and retain information, his power to outline judiciously that which is read. Is he lazy or active? What are his sexual ideas and of how much importance are they to him? What degree of self-reliance does he possess? What type is his feeling of inferiority? Is he socially inadaptable? Has he had a love affair? Is he moody? Are there any evidences of a feeling of inferiority? Is he adaptable? Is he inventive?

Planning Special Library Days

Special library days should be assigned to certain wards. There should be no rush. Patients can be taken to the library and allowed to choose their books, if possible, by themselves. If they are unable to do so, the assistant should direct them. I believe that one might also assign periods for reading aloud and story telling in the ward, thus awakening dormant interests, on the same principle that applies in the so-called group method of treatment for dementia praecox. Reference books create considerable interest, and such books as "Ask Me Another" are of great value.

On my own wards I make a practice of having magazines available at all times. I also encour-

age subscription to the local dailies. Frequently I have noticed patients glancing casually at odd sheets from newspapers. One man, in particular, eventually made a habit of picking up a piece of the paper and gazing at it intently for long periods. Later he began to read aloud aimlessly and he has lately taken to reading the daily paper in a systematic fashion. Sometimes he reads aloud, but the content of his speech is nothing like the text in the paper. This may not seem to be of any importance, but to me it is an evidence that certain changes are taking place, which would not have occurred unless the literature had been on hand.

Case Histories

One patient had a good home environment and background and was fairly ambitious before becoming ill. He had received a fairly good education. His school life was normal, though he discontinued school to go to work. He seemed to have a mechanical trend of mind. He became a clerk in a railroad office and evidently was anxious to work up in the railroad world. The family history revealed no evidence of neuropathic disease. When the patient was admitted to the hospital on July 1, 1926, he was dull, apathetic and confused. He was placed in one of the untidy wards but later was sent to a more active ward where he failed to take any interest in his occupational therapy assignment. He hallucinated continually, being impulsive, unpleasant, irritable and quarrelsome. He would walk restlessly about the ward with little short steps, laughing to himself and shaking his head. About three months ago, the patient began to walk over to the table on which newspapers and magazines were kept and to stare intently at the sheet of newspaper for possibly ten or fifteen minutes. He would then go back to his seat and sink into his usual apathy. Later he would go back, pick up a piece of the paper, stare at it and apparently read it aloud. His talking, however, was entirely irrelevant and incoherent. At a later date he interspersed these mumblings with actual extracts read from the paper. Recently he has been reading directly from the paper and has evinced interest in some of the current events, although he does not talk about them. A few days ago he was sent to the library, where he chose for his entertainment and enlightenment a copy of the *Mid-Week Pictorial*.

The patient has become quieter. He does not hallucinate so much and it is hoped that eventually he may be induced to undertake some occupational therapy work which will make him less of a care. No particular type of literature is to

be avoided in this case, but above all the patient should be interested in something.

Another patient had a fairly good background. Attendance at school had been irregular, and he seemed to have been backward. He was large for his age and was evidently sensitive because of this, which may have accounted for his delay in finishing school. He had no particular interests. He was somewhat religious. He was fairly sociable and liked boys and girls equally well. He had been married but because of an unfortunate marital experience had separated from his wife. At one time the patient smoked to excess but had given this up since he was discharged from the army.

Bibliotherapy as a Reconstructive Agent

When the patient was admitted to the institution on January 23, 1928, he was confused, mumbling and self-accusatory. He had evidently developed a psychosis during his stay in a general hospital after an appendectomy. He was generally inaccessible, but at other times was willing to talk. He showed marked delusional content and religious trend and had ideas of self-abasement, believing that he had committed some horrible sin. He became confused and gradually sank into a stupor. About three weeks after his admission he seemed well enough to be taking some notice of his surroundings, and a copy of *Popular Mechanics* was brought him after he had been asked if he would care to write home and had refused the suggestion. His attention was temporarily aroused and when left alone he gradually grew sufficiently interested to turn the pages and read. After some time he asked if he might not have writing material, whereupon he wrote a fairly coherent letter home. Since that time he has shown more interest, performed his occupational therapy assignment and visited the library fairly regularly. He is now on parole and has a regular occupational therapy assignment, assisting in one of the diet kitchens. Of course, for such a patient literature should be light.

The idea of using books as a therapeutic measure is certainly not new, and recently I noted in a library publication the word "therapy" used in this exact sense. But the idea is usually developed along the lines of recreation and diversion. I suggest the use of bibliotherapy as a reconstructive agent in its broadest sense.

I wish to acknowledge the cooperation given me by Miss Johnson, the librarian at this hospital, who checked the type of literature called for by patients and who also prepared the card which is reproduced here.

Mothers Pay for Their Babies in Advance Here

A plan that was originated by the maternity patients of Chicago Lying-in Hospital is that of paying for their babies on the installment plan, and in most cases prior to delivery. This plan is described in detail in *Hospital Topics and Buyer*.

Prospective mothers in attendance at the prenatal clinic, to which periodical visits are required, asked if they might not pay their hospital bill in advance by making a small down payment and by leaving a specified sum on each visit to the clinic. A flat rate of \$45 is the minimum charge for maternity service. Semiprivate patients are given a ten-day rate of \$65, provided their income does not exceed \$35 a week. With both classes of patients, advance payment is optional. They must, however, pay on admission to the maternity service. Private patients are asked to pay \$75 on admission and the rest when they leave the hospital.

Jessie F. Christie, superintendent of the hospital, says the plan has done much to remove the old charity idea—that because a person's income is meager, hospital care must be given free. The patient appreciates the hospital's attempt to serve her at a minimum cost which creates a feeling of responsibility and thrift.

For those patients who cannot afford to pay for hospitalization, a home delivery service is in effect. Where the patient can afford to pay for this service a rate of \$22 or \$22.50 has been established. Home deliveries are made practically as aseptic as those in the hospital. The attendants carry with them on their visits a complete delivery set up.

Many patients are taking advantage of the home delivery service. During January, out of 411 patients, 173 were home deliveries and 238, hospital. Out of 4,598 deliveries last year, 1,497 were home deliveries.

What the County Medical Society and Hospital Mean to Each Other

A close relationship should exist between the county medical society and the hospital, says the *Journal of the American Medical Association*. It is natural for the hospital to look to the medical society for guidance in extending privileges to local practitioners and in discriminating between the fit and unfit.

In many cases, according to the article, the staff of the hospital coincides with the membership of the county medical society. In other hospitals, where the staff is more restricted, membership in the county society is a prerequisite for staff membership.

Some county societies alternate their meetings with those of the staff. In some places the two are united. In other places where they are maintained separately, the day and hour of meeting are arranged to avoid conflict. The greatest single principle to be observed, says the *Journal*, is that the medical society meeting is primarily for scientific discussions, while the object of the staff meeting is to discuss matters that relate to the care of patients or other problems within the hospital.

Of the 3,076 counties in the United States, 1,794, or 58.3 per cent, have one or more hospitals within their borders.

The Superintendent Takes a Lesson in Hospital Planning*

By VERONICA MILLER, R.N.

Superintendent, Henrotin Hospital, Chicago

WHAT are the first steps to be taken by a superintendent in the planning of a hospital? The question is an appalling one. It is like being asked, "What are the first steps to be taken to enforce prohibition?" The question has many aspects. For instance, the requirements of a large city hospital would differ from those of the hospital in a fashionable suburb with a clientele from the surrounding community. The needs of the hospital in the heart of a manufacturing center caring only for industrial cases would contrast greatly with those of the teaching hospital connected with a university. And such comparisons might be continued indefinitely.

Some of the salient points to be borne in mind during the preliminary steps of planning a new hospital are: (1) a general survey of organization and location; (2) an outline of the financial and building programs; (3) a systematic investigation of hospital construction materials and equipment; (4) a complete list of everything needed in a hospital; (5) a close study of the plans before the working drawings are made.

Plan First; Build Afterwards

The hospital superintendent and his organization should give a great deal of thought and study to the project before the building program is started. This should be done for the reason that much speculation and promiscuous building appear to be taking place in the hospital field to-day. These are not confined, however, to the hospital field alone. One need only look around to see the hotels that were built by persons who built first and thought afterwards. Since much has been written about the cost of medical and hospital care in the current magazines in many cases by persons who lack hospital affiliations or medical education, the public has been led to believe that great fortunes are to be made in owning and operating a hospital. Recently a promoter went so far as to say that heretofore the doctors and trustees were the only persons who shared in the enormous profits made in hospitals, but

from now on it would be possible for the common people to buy stocks and share the profits.

This idea is not confined to speculators and promoters alone. One of the executives of a leading hotel recently said to me, "I should like to own a hospital. It must make a lot of money." In turn, I asked him, "Do you with all your knowledge of the hotel field know of any first-class hotel in this country that is giving a guest twenty-four hour service and serving three meals a day in his room for \$3.50 or \$4 a day?" He was somewhat surprised, but he could not think of any hotel that was giving such service. While it is true that some hospitals do not have such low rates, there are plenty that do. The tendency nowadays seems to be to speculate at any cost. That is why those who plan to build should have a clear vision of the field as it exists to-day.

Determine the Size and the Cost

In building a general hospital, two things must be decided before any intelligent planning can be done. One is the size of the hospital and the other is the amount of money to be spent. The size of the hospital can be determined by a survey of the organization, the community and the clientele to be served. A survey of the organization will include a history of its origin, its growth, the type of work done up to the present time and the possibilities of expansion with increased facilities. Although hospitals do not always draw all their patronage from the immediate surroundings, it is nevertheless an important thing to have a community survey. For example, in a congested area in a metropolitan city there are naturally more accidents than in the outlying districts or in the country. Therefore the emergency department of a hospital in such a district is more important and deserves more prominence than one in a hospital in a more peaceful locality.

Deciding the amount of money to be spent is almost as difficult as the task of getting it. Figures on costs of hospital construction for the past twenty-five or thirty years are available, but the deciding factor on how much money will be

*Read at the Joint Meeting of the Illinois, Wisconsin and Indiana Associations, Chicago, February 19, 20, 21.

necessary will depend on the type of construction, the location, the floor plan, the amount and the quality of the furnishings and equipment. As an asset nothing quite takes the place of ready money.

Location is something that frequently gives no small amount of concern. Zoning laws are an important factor and should be thoroughly investigated. Accessibility of the site must not be overlooked. The main reason that most hospitals in large cities are not more ideally situated is not so much the monetary value of the property, but because property owners refuse to grant permits near their property for hospital purposes. It seems that as long as we are to huddle in skyscrapers, the final decision of locating hospitals in ideal places will be the heritage of some future generation.

If we are to judge the present in the light of the past, broadly speaking, the average life of a hospital building is from twenty-five to fifty years. Some of them live to seventy-five and some have been known to live to be a hundred years old. Such being the case it seems that a few years of study is not only justified but is necessary before the actual construction is begun. Of course, we may engage a hospital consultant, but if we ourselves do not thoroughly understand what we want we shall be unable to work intelligently with the expert or architect. Money spent on a study tour of hospitals would be a good investment, especially those that compare in size with the hospital that is being planned. There are new innovations in large hospitals that may be introduced into those of lesser size but the hospital nearer the same size of the one to be built will have a great deal more to offer.

What a Study Tour Will Reveal

Most of the hospitals built within the past few years have been admirably described, supplemented with reproductions of the floor plans and pictures of various departments, in the hospital journals. Still there is nothing that takes the place of seeing the real hospital in operation. Although we have accurate statistics of the cost on construction and relative figures of the number of beds required per thousand population, new ideas are constantly being developed, and the statistics of to-day will be old to-morrow. There are many conflicting opinions about the methods of arranging different departments. Consider, for example, the opinions of various superintendents regarding the handling of the food service. One thinks that only an insane person would approve central service. The other says that it is absolutely the only way to handle food efficiently.

A brief investigation proves that different systems work with equal satisfaction, depending on the efficiency of the personnel.

A study tour will emphasize the similarity in many hospitals in different sections of the country. Some architects develop a trend in their work that is as easily recognized as is the technique of an artist. A great deal may be learned about equipment in the same way. Sometimes equipment manufactured in the East may be found in use on the West Coast, but this is not general because of the high cost of transportation. Costs are correspondingly high for the same reason. Due to climatic conditions peculiar phases enter into the building projects of a hospital in the West. Sometimes special foundations are required owing to the possibility of earthquakes.

Putting the Puzzle Together

It is important during such a tour to tabulate in a systematic manner the information obtained. The record will be frequently referred to and will prove its value many times. To study other institutions does not mean that we plan to duplicate any particular one, but for the present it seems to be about one of the best methods of research available.

The following is a brief outline of the major points to be noted: total cost of building; cost per cubic square foot; value of property; location; reinforced concrete or steel structure; number of stories; style of architecture; materials used for outer walls; number of basements; cost of plumbing; amount, cost and type of tiling; amount and cost of soundproof material; cost of equipment and furnishings; type of floor; number of private rooms and rates; wards, number of beds and rates; number of children's beds; number of bassinets; number of major and minor operating rooms; number of delivery rooms; out-patient department; typical floor plan; type of food service; central sterilizing plant or small units; social service; training school; special features such as radios; number of stations; number of telephones.

When we have returned from the tour, it is a good plan for us to have an individual conference with the department heads, the operating room supervisor, the pathologist, the roentgenologist, the dietitian, the obstetrical supervisor, the floor supervisors, the medical staff, the office manager and the chief engineer to get their ideas about the planning of their respective departments. An elimination process will doubtless be necessary, but some of their ideas will be invaluable. Some department heads are eminently proficient in

planning their departments and they should accordingly be given recognition.

When the preliminaries are completed, we are now ready to select and consult a competent architect. Before we do so, however, it is important that a complete list be made of everything we want in the hospital. Before the architect can proceed to make preliminary sketches the following information is necessary: type of hospital building; program for future buildings; ultimate size of the institution; the relative size of the surgical, the medical, the emergency, the maternity, the physiotherapy, the out-patient, the laboratory and the x-ray departments; the proportion of charity beds; the proportion of rooms to wards; the housing of nurses and personnel; educational facilities; the relation of the hospital to medical schools; the type and height of the building with relation to the money available; the type of food service; present funds; endowments and scheme for raising money; the cost of the property; carrying charges; income after completion.

When we arrive at the stage of working on the blue prints, we are ready to put our puzzle together. Generally we find it to be intricate and, as is the case with many puzzles, when it is almost solved we find a few extra parts that do not seem to fit into the picture. With patience and perseverance, however, they may be made to fit.

It is necessary to study the floor plan closely. To see a $\frac{1}{8}$ -inch scale layout of a room loom up into a full size reproduction is sometimes startling. It is a good thing for the superintendent to take a yardstick and measure off each room for patients and place the furniture exactly as it would be indicated on the drawing to scale.

When the working drawings and specifications are finished and ready for the bids, then is the time to get an accurate estimate of the cost of the entire project. Although cost of materials and labor conditions vary from time to time, yet they all enter into the aggregate and are the final deciding factors on the cost of construction.

The Patient's Stay in the Hospital Thirty Years Ago—and To-day

Thirty years ago the average length of a patient's stay in Waterbury Hospital, Waterbury, Conn., was thirty-five days. Last year the average stay was only eleven days, the annual hospital report for 1929 shows.

"Even after making an allowance for the extra cost per day to the patient at the present time, we find that the final cost to the patient is actually much less than in 1899, and the patient is returned to his home to become a wage earner three weeks earlier," the report states.

The report further points out that last year was the busiest year Waterbury Hospital has ever had. There

were treated on the wards 5,091 patients as compared with 4,664 the previous year. During the year 433 patients received 4,861 days of free treatment which cost the hospital \$31,159.01. There were also 4,249 patients who could afford to pay only a part of the cost to the hospital for their care. They were given 47,695 days' treatment. A little more than 8 per cent of the patients during the year paid the full cost of their treatment. The daily per capita for all patients based on the total expenditures in all departments was \$6.41 in 1929 as compared with \$6.28 for 1928.

"These figures show," says the report, "that one of the chief functions of the hospital since its foundation—to care for those who apply to it for treatment whether or not they are able to pay—has been generously performed."

Dr. B. Henry Mason is the hospital's superintendent.

The New Public Health Program of the Commonwealth Fund

The new public health program of the Commonwealth Fund, with 1930 as its first year, will draw upon the experience both of the child health demonstrations and of the rural hospitals, but it will provide a fresh approach to rural health problems, according to the fund's newly published report.

In an effort to encourage the development of both public health and general medical service in rural communities, specific contributions to professional education will be set up in each of two or three states. The projects, to be initiated and administered by the state health departments, will include the formation of a field staff to build up local health organizations and the establishment of well rounded health units in two selected districts. The educational projects will include the strengthening of the medical schools which chiefly train doctors for service in the selected states, scholarships or loan funds for students of medicine who intend to enter rural practice and fellowships for rural physicians who wish to improve their grasp of the best current technique.

Mental and Nervous Cases Show an Alarming Increase

If the number of patients in hospitals for mental and nervous diseases continues to increase at the present rate, by 1934 more than half a million persons will be inmates of such hospitals, according to the hospital number of the *Journal of the American Medical Association*. "This situation most seriously challenges the government of the people of the United States," the article says.

Nervous and mental hospitals are growing faster than all other types of hospitals combined. There are only nine more such institutions than there were two years ago, but in that period the average number of patients has grown from 349,667 to 395,407.

A. M. A. figures show that general hospitals, children's and skin and cancer hospitals are increasing, while tuberculosis institutions and those specializing in maternity work are decreasing. The volume of work in isolation hospitals and in eye, ear, nose and throat hospitals is declining. Neither gain nor loss is noted in the work of industrial hospitals.

Wherein O. P. D. Accounting Methods Are Lacking

By HENRIETTA D. BABBITT

United Hospital Fund of New York

THE growing interest in the cost of hospital out-patient work and the lack of standardized definitions by which items can be compared, interpreted or reported through questionnaires, inspired the United Hospital Fund of New York to make a study of conditions of out-patient department accounting.

Hospitals are coming to appreciate more and more the increasing importance of the out-patient department. This department is a real factor in reducing the pressure of in-patient work. It is also becoming more of a social and economic asset to the community. It is safe to predict that before long hospitals will realize an urgent need for exact costs of all services in the department.

In this study it was found that the typical hospital did not consider the allocation of the indirect expenses to the out-patient department. Comparisons could not be made safely because a relatively small number of hospitals made careful segregation of these expenses. There was a growing tendency, however, to apportion indirect out-patient items.

Except in a few instances the conditions relative to the accuracy, uniformity and practices in the out-patient department bookkeeping were far from satisfactory, either to the majority of the institutions or to the United Hospital Fund. Although the hospital accountants cooperated with the investigator it was necessary to calculate percentages from incomplete data.

Usually department costs were restricted to those known as direct charges of salary, wages and supplies. Even these items were not always

complete because the services of many part-time workers, such as graduate, undergraduate and student nurses, interns and doctors, were not considered as part of the departmental cost. Nor were the actual accounts of the medical and surgical supplies or instruments kept unless there was a central distributing point where the

requisitions went and records were kept. Even these requisitions were sometimes disregarded and no notations made, with the result that vague estimates were made as to the portions chargeable to the out-patient department and those chargeable to other divisions.

Light, heat, power, floor space, laundry, linen, cleaning, repairs, replacement, board (lunches), lodging (room), insurance, social service and other items were frequently thought of as compris-

ing separate "units." Rarely were these "units" apportioned to the various services. Each was supposed to be complete but included only the salary and supplies and not any of the allocated costs. Therefore these figures fell short of completeness.

Light, heat and power could be measured when separate buildings were supplied but otherwise the cost was considered as a necessary part of the general maintenance expense and was carried by the hospital as a whole rather than by departments.

Almost without exception floor space was disregarded for the out-patient department, x-ray, laboratory and other special services. If it was charged, it was by floors, not often by the square or cubic measurement.

What the Study Tells

THIS is the first of a series of three articles relating to out-patient accounting in forty-seven hospitals. These articles are based on a study made by the United Hospital Fund of New York in co-operation with the Associated Out-Patient Clinics Committee of the New York Tuberculosis and Health Association in 1929. The purpose of the study was to provide the hospitals with comparable material and help them to arrive at a better understanding of their out-patient department accounting problems. The results of the study revealed the inadequacy of the present methods of ascertaining out-patient department costs.

Invariably hospitals considered salary as the cash paid to the employees, whereas a large part of this item, for the hospital, was the board, laundry and lodging given to the employees.

Only the occasional institution included the additional cost of meals for employees, the personal laundry or the living accommodations with the other department expenses. The common way of calculating the value of "board," when the hospital included this item, was to multiply the number of employee meals by the cost per meal of raw food only. It can readily be seen that here again a great portion of the real cost was not included.

One of the largest hospitals made a study to see how much the daily cost per meal would be increased if all the factors were included. The average daily per capita cost of meals had been figured at fifty-eight cents but when all the items of expense were considered the cost was raised to about \$1.50. This institution said that the quoted per capita meal cost did not mean much as used at present.

The details of social service expense were much too involved to be incorporated in this discussion. Unless the expenses for the social service work were paid by the hospital, rather than by the ladies' auxiliary, nothing for this item was included in the cost. Hospitals rarely made allocations of social service cost to in and out-patient departments.

Naturally enough if certain indirect maintenance expenses were not allocated to the out-patient department costs (and much of the special service cost was not apportioned to the out-patient department), the figures given as cost per patient day (the in-patient cost) were fallacious. It can be granted that many estimated items of the out-patient department were too low and therefore the quoted per patient day was too high.

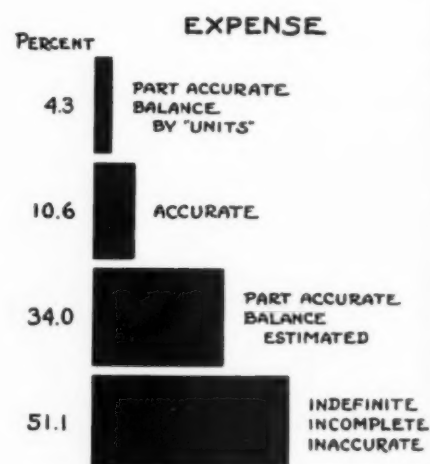
Cost Per Visit Varies Widely

There were wide variations in the out-patient department cost per visit. The average arithmetical cost per visit for the forty-seven hospital out-patient departments was eighty-three cents. Only 32 per cent (fifteen) of the hospitals paid any of the out-patient department doctors. Had all of these institutions paid all the physicians working in their out-patient departments the cost per visit would have been much higher for both the individual hospital and the average of the forty-seven institutions studied. The lowest cost per visit was thirty-two cents and this did not include all the maintenance expense items. The highest cost per visit was \$3.12. This consisted

of many exceptional items and was for only a portion of a year. Of course neither of these extremes was normal.

Approximately half (51 per cent) of the forty-seven hospitals had incomplete cost figures for the out-patient departments. Yet institutions attempted general comparisons of their cost per patient day and cost per visit. During the course

*Data arranged
by accuracy
of accounting
records in
forty-seven
out-patient de-
partments.*



of the investigation many superintendents convinced themselves that the details asked for would help them in the administration of the institution.

Either as a direct or indirect result of this study eight organizations completely changed their accounting systems. When the investigator revisited eight other hospitals the superintendents caused minor changes to be made in the record keeping so as to provide better analysis of costs.

Unless proper records were kept the institution did not know the out-patient cost per visit. The study revealed that there was no uniform definition or use of the term "visit." Visits and treatments were often used interchangeably. Many times the special clinic attendance was entirely disregarded in the count, even though this type of service was by far the most costly to operate. One of the largest hospitals left 17,000 of these visits out of the calculation. After the study was complete one superintendent, being curious, made an investigation which showed that his institution would have had an increase of 30,000 to 40,000 visits a year if the special services had been included in the out-patient department count.

What was true of the out-patient department accounting was equally true of the in-patient division. For instance, when endowed beds were used the patients were often counted as free. And in the maternity cases, the mother was some-

times counted as paid while the baby was listed as free. Both of these reportings distorted the true picture of free work done by the hospitals. Unless there is uniformity in reporting and unless there is standardization of the items counted in the cost, there can be no reliable basis for comparisons.

Findings of the Study

The general conclusions reached in the United Hospital Fund and Associated Out-Patient Clinics Committee study were as follows:

1. Hospitals had no standard accounting system with uniform definitions, therefore comparisons of costs were not accurate.

2. Many hospitals did not make serious attempts to ascertain complete out-patient department expenses. Direct charges for salary expenditures for the full-time workers in the out-patient department were made. The charges for medical and surgical supplies were for the most part mere estimates. The amount allowed for board and maintenance of the workers was seldom included in the cost. The salaries for the employees who worked only part of the time in the out-patient department were occasionally included. Because of these the amount listed as cost per patient day for the hospital was necessarily greater than it should have been.

3. Few hospitals made accurate allowance for space occupied by the out-patient department or special sections, such as x-ray and laboratory.

4. Few hospitals considered board and lodging as part of the employees' salaries and the item was seldom apportioned to departments.

5. Analysis of the distribution of supplies to departments was not frequent with hospitals. Requisitions, when used, did not always result in checking or recording the apportioned distribution.

It was not within the province of the study to work out details in the accounting, still certain general recommendations were made for the fundamental accuracy in accounts. These, stated briefly, were as follows:

1. Terms used in accounting and the items that enter into out-patient department statistics should be standardized so that there will be a correct and uniform basis for comparisons.

2. The formula for arriving at costs should be standardized.

3. Indirect expenses should be apportioned and included with the direct out-patient department expenses.

4. Separate records for the free and part-paid visits to the out-patient department should be kept. These records should include all visits to

the special services as well as to the general clinics.

5. The cost of social service should be allocated to the out-patient department in order that complete accounting may be made and accurate cost per visit ascertained.

To summarize briefly the findings of the study, it may be said that while approximately 50 per cent of the forty-seven hospitals had incomplete and inaccurate costs for the out-patient department, fortunately there is a growing tendency to give due recognition to this problem. Hospitals are making an effort to segregate and apportion expenses to the out-patient department. The items showing the most inaccuracy when allocated were light, heat, power, floor space, laundry, linen, cleaning, repairs, replacements, board, lodging, insurance and social service. There was no uniformity in reporting the items involved in the cost per visit and therefore comparisons were almost worthless.

In another article the accuracy and relation of the out-patient department income to the expense will be presented.

Canada Studies Its Institutional Fire Hazards

A pamphlet entitled "Unseen Hazards in Hospitals, Clinics and Other Institutions" has recently been published in Canada as Bulletin No. 1 of the Association of Canadian Fire Marshals and the Dominion Fire Prevention Association.

In the foreword it is stated that in hospitals and similar institutions in Canada and the United States fires caused by negligence exceed an average of one per day throughout the year. The main object of the pamphlet is therefore that hospital superintendents and others responsible for the administration of institutions may have brought to their attention some of the existing hazards.

A paper on "Unseen Hazards in Hospitals," presented by George F. Lewis, deputy fire marshal of Ontario, before the last annual meeting of the Association of Canadian Fire Marshals has given expert consideration to the prevention of fire in hospitals, the dangers of x-ray film storage, hazards from flammable anesthetics and kindred topics. This paper as well as other valuable information is included in the pamphlet, which is of great interest to all hospital executives. It is published by the Department of Commerce, Ottawa.

The Value of Specific Assignment Sheets for Workers

In institutions in which the duties of various workers are likely to overlap, typewritten, specific assignments have been found to be effective in allocating jobs, says *Buildings and Building Management*. The orders are short and direct; the worker cannot successfully plead misunderstanding.

Practical Administrative Problems:

Lessening the Difference Between Income and Expenses

By JOSEPH C. DOANE, M.D.

Medical Director, Jewish Hospital, Philadelphia

IN PRECEDING issues of THE MODERN HOSPITAL, suggestions have been made relative to the methods by which the income of the hospital may be increased. It is the purpose of this sketch further to discuss, more or less generally, the sources of hospital income, and to endeavor to point out ways and means by which the difference between institutional income and expenditure may be lessened. Worried boards of trustees are striving to learn ways and means by which they may maintain a customary high standard of service, and yet at the same time prevent that specter—the annual deficit—from too seriously harassing the hospital's work.

Unfortunately, no person as yet has been able accurately to delineate a medical service that can be considered universally adequate. Moreover, hospital standards and procedures are so varied that the amount and quality of medical service the dollar will purchase is far from uniform.

Is the Per Capita Cost Too High?

The first thing for a board of trustees to ascertain is whether its institutional per capita cost, taking for granted that it is properly computed, is inordinately high. It ought not to be difficult for general hospitals to secure such information since illuminating cost comparisons can be easily made with similar hospitals in other localities in this country. The smaller the institution, all things else being equal, the more it will cost per patient to provide adequate medical service.

Most institutions of approximately a hundred beds find it increasingly difficult properly to care for the sick for less than \$6 a day per capita. Perhaps the average nonteaching general hospital of 200 beds or more, excluding municipal and state institutions, will more closely approximate a cost of \$5.50 a day. Many hospitals, however, that appear to be doing good work are expending slightly less than \$5 per patient day. In another group of institutions in which *de luxe* accommodations are available and which, perhaps, are conducting in addition expensive investigations or teaching efforts, the daily cost for each patient may exceed \$7 or \$8.

If an institution of moderate size, therefore, is expending less than \$6 a day, is furnishing modern and scientific treatment to its patients and is conducting at the same time an adequate school for nurses, it may be roughly conjectured that no unusual and uncalled for expense is being entailed. When once a board of trustees has come to the conclusion that it cannot provide the basic necessities of medical care for its patients for less money than it is expending, then the only other alternative is to increase the income of the hospital. Such a board should require of its superintendent a careful statistical study of the amounts and sources of income, illustrated with a graph covering the experiences of the past five years at least, showing which of these sources is responsible for the general reduction in revenue.

Sources of the Hospital's Income

Generally it may be said that the income of a hospital is derived from the payment of board and special charges by patients, from interests on endowment funds, from special gifts and from appropriations from some community, municipal or state group. The experiences of several hospitals are here set forth to illustrate the variance in percentages of total earnings derived from various sources.

In Table I will be seen the percentage of total expenses which were met by each of a group of eleven hospitals from incomes derived from various sources. It will be noticed, for example, that in Hospital No. 3, 68 per cent of its expenses was met from funds received for the board of patients, and that 25 per cent was derived from all other earnings. In this particular institution, which experienced an operating deficit of 6 per cent and which met by gifts and other contributions 27 per cent of its total expense, a paper profit of 21 per cent was realized. This profit, however, was more apparent than real, since in this particular year, a number of large and unusual gifts had been received.

Hospital No. 4 possesses but few ward beds, and a rich clientele. It will be noted that in this instance, an operating deficit of 13 per cent was

still further reduced by a contribution from a community chest. It is certainly not an apt comparison to make, to consider this type of institution with one that is carrying a large free patient load.

Hospital No. 6 is an institution for the treatment of the chronic and aged. It will be noted here that 47 per cent of its expenses was met by funds secured from board, while only 1 per cent came from other earnings. The operating deficit of this institution was 51 per cent.

Hospital No. 8 represents a still different type of institution in which a small in-bed occupancy was required to meet the expense incident to the conduct of a large specialized dispensary. Even

It may be said, therefore, that the income of hospitals generally depends on the efficiency and type of service rendered, the degree of hospitalization and prosperity in the particular community, the kind of beds available from an economic standpoint and the loyalty of staff members which is practically exemplified by their desire and ability to refer patients to their institution. The organization of the hospital and the liberality of its rules governing the intramural activities of its major and minor staff members are also important factors to be considered. Each of these conditions will be given more or less detailed mention later in this article.

In the group of hospitals represented in Table

TABLE I—PERCENTAGES OF TOTAL EARNINGS IN ELEVEN HOSPITALS

Hospital	From Board	Other Earnings	Total Earnings	Operating Deficit	Community Chest	All Other	Deficit or Profit
1	53.0%	20.5%	73.5%	26.5%	12.2%	14.3%	.....
2	45.0%	20.4%	65.4%	34.6%	14.5%	1.2%	—18.9%
3	68.3%	25.7%	94.0%	6.0%	.....	27.0%	+21.0%
4	63.0%	24.0%	87.0%	13.0%	4.7%	84.0%	+ 1.0%
5	52.7%	35.3%	88.0%	12.0%	.....	11.0%	+ 1.0%
6	47.8%	1.2%	49.0%	51.0%	16.4%	35.0%	+ .4%
7	56.9%	23.6%	80.5%	19.5%	16.0%	5.8%	+ 2.3%
8	43.4%	9.8%	53.2%	46.8%	23.0%	15.0%	—18.8%
9	64.5%	17.5%	82.0%	18.0%	32.0%	6.2%	— 8.6%
10	9.0%	6.5%	15.5%	84.5%	56.6%	26.0%	— 1.9%
11	19.3%	2.1%	21.4%	78.6%	57.2%	24.2%	+ 2.8%

Note—The minus sign represents deficit; the plus sign, profit.

In a period of six months, the incomes received by Hospital No. 2 and Hospital No. 4 were as follows:

Hospital	Total Income	Total Hospital Income	Total Board Income	Welfare Income	Total Other Income	Per Cent Welfare	Per Cent Other	Per Cent Earnings
No. 2...	\$328,509.21	\$272,418.59	\$187,974.00	\$50,000.00	\$56,090.62	15.0%	17.0%	83.0%
No. 4...	189,888.13	185,333.66	130,937.32	3,500.00	4,554.00	.018%	.024%	97.0%

The foregoing figures represent income based on charges to patients. Hospital No. 4 charged off an average of 79 cents a day on 699 ward days. Hospital No. 2 charged off as uncollectible an average of \$1.06 for 10,403 ward days.

in consideration of this fact, it is believed that in this institution better credit work would have made possible the lowering of this operating deficit. Moreover, the time for competition in bulk of work done, irrespective of the expense and amount of income therefrom, is rapidly passing. There are institutions in this country which, in ways sometimes definitely questionable, endeavor to increase statistically the number of patients treated or operations performed in order to influence favorably groups vested with appropriating power.

Hospital No. 10 represents a still different type of institution in which children of indigent parents are given medical care. This institution has no private service and, therefore, is able to realize only a small income from its activities. In the case of this hospital but 15 per cent of its expenses was met by earnings.

I, it may be interesting to note that 47.5 per cent of their total income was derived from board, 27 per cent from endowment and gifts and that there was an operating deficit of 35.5 per cent. It is to be remembered, however, in reading the financial statistics covering this group, that these hospitals are representative of types, ranging from those with practically no ability to derive funds from their work to those that are almost self-supporting. It should also be recalled that in a computation of the profit or loss, as a result of their year's work, grants from a local community fund are included.

It is interesting to compare again the experience of fifty-six hospitals in the United Hospital Fund in New York, with the foregoing statistics, since in this group of institutions, 30 per cent of the total income was derived from endowments and contributions. It may also be informative

to remember that in the last named group, \$3.49 a day per patient was the average income, while in the former group of institutions, \$3.19 was realized in this way.

The amount of money any hospital receives as a result of collections for board and room of patients treated therein, not only varies greatly in the total amount realized, but also as to the

rating all ward patients as they are admitted to the institution. She is also expected to collect a week's board in advance upon admission and to continue to be responsible for the collection of board as long as the patient is under treatment. She is thus brought into close contact with the friends and relatives of these patients and is informed concerning their home conditions, per-

TABLE II—ANALYSIS OF INCOME FROM BOARD

Hospitals	Private	Ward	All	Per Cent of Income	Per Cent of Expenses
1	\$4.58	\$1.81	\$3.02	72%	53%
2	\$5.57	\$2.55	\$3.73	67%	49%
3	\$5.80	\$1.34	\$2.53	70%	68%
4	\$6.32	\$3.46	\$4.10	69%	67%
5	\$3.53	\$1.18	\$2.13	59%	53%
6				96%	47%
7	\$4.63	\$1.73	\$0.99	70%	57%
8	\$6.70	\$0.71	\$2.64	59%	32%
9	\$5.16	\$2.96	\$3.05	79%	55%
10	\$4.59	\$0.32	\$2.19	59%	9%
11	\$3.07	\$0.16	\$0.43	78%	19%
Totals	\$5.10	\$1.01	\$2.17	70%	49%

percentage derived from private, semiprivate and ward patients.

The same group of institutions listed in Table I is included in Table II.

It will be noted that the average amount of money received from private patients varies from \$3.07 to \$6.70 a day, and that the average income from ward patients ranges from \$0.16 to \$3.46 a day.

Attention is directed to the fact that the average income from the private patients in this group was \$5.10 per day. The average income for private and ward patients in this group was \$5.10 and \$1.01 a day respectively. Seventy per cent of the total income was thus derived from the board of patients, while but 49 per cent of the expenses was met from this source.

It would seem that in the hospitals all over the country, the attention of boards of trustees should be directed to the fact that ward patients should be required to pay as great a percentage of the cost of their care as they are able. In some hospitals, a ward patient is immediately considered as a financial loss, without any attempt being made to collect a part or all of the fixed ward rate. On the other hand, instances are frequently noted where too great pressure is placed upon ward patients from the standpoint of meeting their hospital bills. In other instances, the collection methods in regard to ward patients are undeniably inefficient.

In an Eastern institution in which there are approximately 200 ward beds, the credit officer in the receiving ward is made responsible for

haps to a greater degree than any other member of the hospital personnel. She should be able, because of this close contact, to collect more money from this group of patients than would be possible by a cashier in an office at a distance from the admission department who never comes in contact with these persons. This particular individual turns into the institutional treasury about \$5,000 a month. While there are some disadvantages to this system, it must be said that these are, in a measure, offset by the financial success that has followed this particular officer's efforts.

The income of the hospital thus depends, in a large measure, upon the amount of free work the hospital feels it should and can perform. Table III illustrates rather clearly the great variance which exists in any group of hospitals relative to the amount of free work done.

It may be said, moreover, that the performance of a great bulk of free work is not always commendable. As has been remarked, it is an injustice to the patient himself to permit free care when he is able to pay something for it. In this group of institutions, it will be seen that in Hospitals No. 3, 4, 9 and 10, only 9, 2 and 4 per cent of free days are given. This is in contrast with certain other institutions in this same group in which from 26 to 56 per cent of all the days of service rendered were free. No difficulty will be experienced in explaining the high percentage of operating deficit in institutions in which over one-half of all their days of service are given without financial recompense.

Not only is it important from the standpoint of the total income realized by the hospital, to consider the size of the free load, the number of private rooms available and the business methods pursued in the collection of funds, but it is also of vital importance for the ward rates of the hospital to be properly priced. One of the greatest drawbacks to community hospital work is the fact that hospital rates vary to such a great degree. It is not at all surprising that the uninformed lay members of a community become confused as to the nature of hospital work, when they are able to secure what, to them, is the same commodity at rates which vary, in different hospitals, several hundred per cent.

In the same group of hospitals set forth in the accompanying tables, it was noted that private room rates vary from \$4 to \$22 a day and that semiprivate and ward rates vary in almost as great a degree. It is feared that the basis for such a divergence of charges is sometimes an evidence of the existence of a competitive spirit in which inferior physical accommodations are priced lower than those in a more modern institution, in order that an older hospital may successfully compete with one more recently constructed. On the other hand, it would seem good business for a hospital to possess one or more rooms which may be denominated as *de luxe*, since from time to time there are calls for such accommodations. Yet, it is far better for rooms

the much discussed middle class, while others, with perhaps more modern plants and with a clientele that would warrant such a rate card, provide facilities for those who are able to pay higher prices for hospital care? Certainly, it does not appear to be proper for hospitals receiving grants from the same community chest to compete for patronage on an equal basis when one is able to provide physical facilities that are far superior to those possessed by the other.

In Table IV it will also be noted that certain charges are made by some institutions which are entirely omitted from the rate cards of others. In some, a charge for the care of babies is included in that for the mothers. In others, from 50 cents a week for the babies of women being treated in a maternity ward to a dollar a week for the babies of those mothers in private rooms is charged.

It is suggested that the rate for ward patients in some instances might be placed at a higher figure from which deductions could be made, rather than at an amount that falls far short of meeting the hospital expense for the maintenance of such accommodations.

The second major classification of sources of hospital incomes is that from endowment and special gifts. Boards of trustees frequently wonder why one institution is willed large sums of money while others are rarely so remembered. Endowment funds bequeathed by former friends

TABLE III—HOW THIRTEEN HOSPITALS RATE WITH REGARD TO THE AMOUNT OF FREE WORK THEY DO

Hospitals	Per Cent Private Days	Per Cent Ward and Baby Days	Per Cent Free Days	Ratio Free to Ward and Baby Days
1	49.0%	51.0%	12.0%	1-4.3
2	50.9%	48.1%	14.8%	1-3.3
3	31.8%	68.2%	9.3%	1-7.1
4	56.8%	43.2%	2.5%	1-18
5	46.5%	53.5%	26.0%	1-2
6	25.0%	75.0%	37.0%	1-2
7	38.0%	62.0%	37.0%	1-1.6
8	42.3%	57.7%	7.0%	1-8
9	39.0%	61.0%	48.0%	1-1.25
10	31.9%	68.1%	4.0%	1-17
11	2.5%	97.5%	56.0%	1-1.7
12	3.0%	97.0%	50.6%	1-1.9
13	25.0%	75.0%	11.0%	1-6.8
Totals	34.0%	65.9%	24.2%	1-2.75

which vary from \$5 to \$8 a day to be occupied 75 or 80 per cent of the time, rather than that more expensive accommodations be rented during but 25 per cent of the days of the year.

It would seem that here is an opportunity for real cooperation and coordination of community hospital resources. Would it not be possible for certain institutions to devote themselves particularly to the provision of facilities for the care of

of the hospital do not come by chance only. A remembrance in a will often results because of a great service that the hospital has rendered at some time to the deceased or to members of his family. Again, a knowledge of, and hence an interest in the work of the hospital, is frequently the stimulus that brings about large institutional gifts. Sometimes members of boards of trustees bequeath substantial amounts to the hospital.

The hospital has many legitimate talking points with which to arouse and to hold the interest of benevolently inclined persons in its community. Children's and maternity hospitals are particularly appealing to those of philanthropic bent. To others, the possibility of the alleviation of human suffering through research strikes a responsive cord. Thus, institutions which confidently expect that some day large sums of money

which they handle. Too frequently, staff members are ill informed concerning room and special charges. Too often are members of the hospital's clientele disturbed because hospital bills mount higher than they had anticipated. Moreover, the salesman who handles many different varieties of the same article, is not quite as convincing as one who exalts the virtue of an individual and distinctive commodity. Too many

TABLE IV—HOSPITAL RATES

Hospitals	Private	Semiprivate	Ward
1	All Free	.....	.....
2—Beds	\$6—\$10	\$4.50 and \$5.00	\$3 and \$4
Bassinets	\$1 a week	\$1 a week	50 cents a week
3	\$8—\$22	\$5—\$7	\$3—no charge for bassinets
4	\$5—\$8	\$4.00	\$1.50—\$3.50
5	\$6—\$10	\$4.50—\$5.50	\$3.50—\$4.50
6	\$4—\$10	\$3.00—\$4.50	Bassinets, \$1 a day
7	Not available	.....	Bassinets under mothers' charge
8	No fixed rates	.....	\$2.00
9	\$5—\$9	\$25—4 beds	.....
Bassinets, \$5 week		\$28—2 beds	Men's, \$25 a week
		Bassinets, \$5—2 weeks	Women's, \$17.50 a week
10	\$8—\$10—\$12	\$5.00	Children's, \$10 a week
11	\$7 and \$8 a day	\$5.00—2 beds	Maternity, \$2.50 a day
		\$4.00—4 beds	\$2.50
12	\$5.00	\$4.50	\$3 a day—no charge for bassinets
13 .....	.....	.....	\$21.00 a week

will be bequeathed to them are doomed to disappointment unless they are alert to the fact that not only must high grade service be rendered to the community, but also that an effort must be made to interest those who are financially equipped to aid the hospital's work, either at the present or at some future date.

It is regrettable that in some hospitals, there appears to be a misunderstanding between the medical staff and the board of trustees. One cannot exist without the other. Not only is the medical staff the scientific backbone of the hospital, but in truth its members are actually in many instances the salesmen of the commodity the hospital has to offer—service to the sick. No business concern can expect to exist unless the article it produces is worthy and of such a high grade that it can compete with the products manufactured by rival firms. Not only must the commodity the staff is expected to sell, be of high grade, but there must be a market for it.

It has already been intimated earlier in this sketch that overhospitalization of any community is sure to diminish the incomes of the individual hospitals comprising the local field. Five beds for every thousand population is usually considered a ratio which is neither excessive nor insufficient. The salesmen of any concern must be loyal and well informed concerning the product

hospital appointments are likely to detract from the effectiveness of any staff member. Staff members cannot provide occupants for high priced private rooms if a financial depression exists. Prosperity must exist in any community before the so-called luxuries can be largely dispensed. Beds, therefore, must be economically fitted to the community, else physicians will not be able to provide patients for them.

It appears to be a necessary practice for boards of trustees, from time to time, to scrutinize the results of the efforts of its staff members insofar as the reference of private patients is concerned. It is, of course, most necessary that staff physicians shall be well equipped scientifically, and it may be set down as a corollary to this statement that those who are best equipped scientifically will be most able to refer patients who are able to pay well for medical care.

In a certain Eastern institution, a careful study was made in regard to the number of patients referred in a given period to that institution by the members of its staff. It was found that 106 staff physicians referred 2,375 patients, 1,550 of whom were treated in private rooms and 825 in semiprivate accommodations. It was disconcerting to learn, however, that 4 per cent of this group referred 35 per cent of the total number of patients, and that 14 per cent of the total num-

ber of physicians referred an equal number of patients, while 82 per cent of the whole number referred but 30 per cent of the patients. In other words, an institution in which a relatively small number of physicians refer a large percentage of the patients treated is in a rather dangerous position, since death or defection of one or more of this group would seriously disturb the income of the hospital.

In another institution in which only maternity patients were treated, it was found that 5 per cent of the total number of physicians patronizing this hospital, referred 47 per cent of the cases, that 43 per cent of this group referred 48 per cent of the cases and that 52 per cent referred 15 per cent of the cases. In other words, in this maternity institution, the board of trustees was surprised and disturbed to learn that 51 per cent of the staff referred 95 per cent of the cases.

In any business concern in which such statistics were presented to the sales manager, there would soon occur some vacancies on the field staff. Yet, there are a number of factors that enter into this matter. Every hospital has a large group of young physicians who are performing dispensary work and whose practice consists largely of patients from the lower economic classes who cannot afford semiprivate or private hospital facilities. Many of these patients are treated at home. Those who require hospital care are frequently admitted to ward beds. On the other hand, while due allowance should be made for this group, a board of trustees which discovers that physicians who are able to refer private cases to the hospital are not doing so, should seriously consider a reorganization of its staff personnel.

The High Cost of Hospital Care Explained

That one of the principal reasons for the high cost of hospital care is the uneven load, is pointed out in the *Educational Buyer*. Not only is the hospital load subject to wide seasonal variations, but it is subject to wide variation for the various days in every week.

The article discusses the subject of uneven loads as follows:

"The typical hospital having 200 beds and carrying a staff for an average load of 85 per cent or 170 patients may find that at midnight Sunday there are only 140 patients in the house. On Monday, it may discharge five patients and admit twenty-five new patients, making the census for Monday midnight, 160. On Tuesday, fifteen patients are admitted and ten discharged, thus leaving the Tuesday midnight census at 165. On Wednesday and Thursday, the hospital load may remain about staple, and then on Friday the discharges may be two or three times as large as the admissions. On Saturday there is

still a more marked drop in the census. Sunday may remain as low as Saturday or it may be even lower. Then the cycle is started all over again.

"In addition to the weekly curve, there is the seasonal curve which follows roughly the amount of sickness in the community and upon these two curves may be superimposed the holiday curve. In the average hospital, the census begins to drop sharply about December 20 and by Christmas eve the house may be little more than half full. The census remains at the bottom of the curve until well after New Year's, and may not begin to build up much until nearly the end of January. This means that for the two months of December and January the hospital must bear the full cost burden with a minimum load. For two months, or for 16 2/3 per cent of the year, unit costs are high and income is low.

"The layman or medical administrator who can suggest a proper and effective method of flattening the hospital load curve will go a long way toward materially lessening the cost of hospital care."

On the Need for Convalescent Homes for Asthmatic Patients

That convalescent homes are needed for the care of asthmatic patients is stressed in a committee report in *Hospital Social Service*. It is suggested that homes for asthmatic children be separate from those for adults.

Children between the ages of two and sixteen years would be eligible to the children's home. Requirements for admission would include: a complete history; an x-ray of the chest; a complete nose and throat examination; a horse serum test; the Dick test; the Schick test; the Manteau test; a course in diphtheria toxin-antitoxin; protein tests and an environmental study. There should be a resident physician at the home, one graduate nurse to every ten patients, and a dietitian.

The adult's home should be at the seashore so as to be beneficial to the patients who are pollen sensitive. The source of application would be the same as for the children. Requirements for admission would include: a complete history; an x-ray of the chest; a complete nose and throat examination; a test for tuberculosis; protein tests; a Wassermann test; an environmental study. Patients should remain at the home at least three months, and diet should be adjusted to the type of the case.

Furniture for both the children's and adults' homes should be either wooden or unpainted furniture; the mattresses should be made of horsehair; the pillows of prime jaspera kapok. All woolen blankets should be washed before they are used. Floors should be either cement or a composition; they should not be of wood. For the children there should be a school under the supervision of the board of education.

Environmental cases should be admitted pending the proper conditioning of the patients' own homes. Pets should not be permitted on the premises. No exterminating powders should be used. If it is necessary to use anything, it should be used in paste form.

"A convalescent home catering exclusively to the asthmatics, where control over inhalants and foods affecting individuals can be exercised, and where patients can be kept for a sufficient length of time to permit them to build up an immunity to the disease, would be a blessing for the unfortunate sufferers from asthma," the report emphasizes.

Editorials

Hospital Statistics

THE American Medical Association for the past nine years has annually made a major contribution to the hospital literature by publishing a list of hospitals which is nationwide in its scope.

Contained in the list is also much useful information concerning the size, type and management of these institutions, as well as the degree of utilization of the beds. Such an enumeration of hospitals is a vital part of the attempt of the American Medical Association to improve the teaching opportunities for recent graduates in medicine. Better care for patients is an inescapable beneficent corollary to the success of this effort.

But a critical inspection of this list will quickly reveal that there is still no standard by which the justice of applying the term "hospital" to any institution may be judged. In the register of hospitals, to which allusion has just been made, are to be found listed homes for the aged, county poor farms, infirmaries of private schools and various other institutions or subdivisions thereof which certainly do not merit classification with the outstanding hospitals observed in the same list. Many of them do not even pretend to care for the sick. The total number of beds available for the care of the mentally or physically ill, as set down by this study, is open to doubt as to its accuracy. To be sure, it would be a Herculean task to visit each institution admitted to the register, and the impossibility of securing accurate information about 6,600 hospitals is readily acknowledged by the Council on Medical Education and Hospitals. Yet, when a 65 per cent occupancy is stated as representative of the use of all of the general hospitals in the field, an erroneous impression is given.

The information in the annual hospital number of the *Journal of the American Medical Association* could be made of greater practical use to physicians and hospitals if a definition of the attributes of an institution to which the term "hospital" is rightly applied would be attempted. Perhaps a more useful end would be served if only those hospitals that had been inspected and passed for internship were listed. Certainly other logical requirements exist besides the purchase of a few beds and a sign to bring a hospital into existence. THE MODERN HOSPITAL

congratulates the Council on Medical Education and Hospitals for performing a service to the hospital field, but it suggests a more careful definition of terms, discrimination in the selection and approval of the deserving and the registration of only those institutions that will bear the careful scrutiny of an informed inspector.

Is it not a task that should challenge the attention of such powerful bodies as the American Medical Association, the American College of Surgeons and the American Hospital Association to draw up standards defining clearly and concisely the meaning of the word "hospital"? Once this is done, could not much good be accomplished by aiding those institutions that fail to meet such requirements to alter their administrative policies and physical and scientific equipment so that such a standard of excellency could be reached?

Robert Bridges, Poet and Physician

THE death of Dr. Robert Seymour Bridges on April 21 robbed the world of literature of a brilliant figure and the profession of hospital medicine of a close friend. Few realize that the man who was made poet laureate of England in 1913 was graduated in medicine in 1874 and for the next seven years practiced this profession at St. Bartholomew's Hospital, the Great Northern Hospital and the Hospital for Sick Children in London.

In this respect he differed from Keats who, being too poor to practice medicine, followed literature as a profession. Doctor Bridges' medical writings were relatively few, and he will be best remembered by his great work, "The Testament of Beauty," which he published on his eighty-fifth birthday.

The word "laureate" originally meant a scholar who was decorated with a laurel wreath. There have been many poet laureates in England, although the first to receive the title officially was Bernard Andreas who came over with Henry of Richmond in 1485. There seems to have been no other official poet laureate until the appointment of Dryden who was deposed in favor of Shadwell, a political move. The office seems to have been an official sinecure until the time of Southey, and its emolument usually consisted of presents of wine and, on certain occasions, of free lodging for a poet who, in return, wrote birthday and new year verses for the royal house.

John Masefield, the new appointee to the office, has produced some of the most beautiful and stirring verses that have ever been written in the English language.

Terms That Can Be Spared

LAST month there met in Washington, D. C., the first International Mental Hygiene Congress. In the course of the deliberations of the distinguished psychiatrists and psychologists in attendance, the passing of the usage of "insane," "lunatic asylum" and other objectionable terms applying to mentally ill patients and to institutions for their care, was repeatedly applauded.

Surely, as the principles of the newer psychiatry evolve, the mysticism concerning mental disease and the belief that something of a disgrace is attached to it are slowly fading. That mental illness often is preventable, is becoming more and more an accepted fact. That both the in-patient and out-patient departments of the general hospital have an obligation to the patient actually or potentially mentally ill cannot be overlooked. To teach the young to correct faulty thoughts and habits is often to bring about a nervous stabilization that prevents a mental break later on. Moreover, delinquency, antisocial behavior and mental backwardness are often but the sequelae of some antecedent disease process, real but unrecognized. Those who are mentally diseased are no longer fettered, neglected or even punished with as great frequency as in the past, but the use of the terminology of a half century ago still implies that too many persons have not grasped the newer conceptions of mental disease.

It is gratifying to note an increase in the number of institutions for the treatment of early and committed cases and the extension of mental hygiene clinics in urban as well as rural communities. Perhaps the apparent increase of mental sickness represents but a greater knowledge of the condition, an earlier and hence more frequent diagnosis. It is to be hoped that with this added interest in this type of disease more successful methods of treatment for hitherto hopeless cases may be attained. To this end the general hospital can make a valuable contribution.

What's in a Name?

THE pharmacist of a large urban hospital recently called attention to the excessive cost of drugs formerly dispensed under a trade name as compared with the prices of official drugs of the same therapeutic value. In making such a comparison, the pharmacist has rendered a distinct service both to the patient and to the contributing public.

To prevent the presence of proprietary preparations on the shelves of the hospital pharmacy is

no easy matter. The pen of the physician seems often with equal ease to order luminal which costs two and a half times as much as its equivalent, phenobarbital; urotropine, which is four times as expensive as methenamine, or atophan, which costs eight times as much as its equivalent, cinchophen. The superintendent of the hospital, however, is often powerless in the face of an order by the physician for a drug that differs from another only in name and in cost. Moreover, the doctor may be sincere in his belief that none but the particular drug will benefit his patient. This is a matter upon which staff action is most necessary. Fairness to the patient certainly dictates that the physician prescribe drugs that are both as efficacious and as inexpensive as possible. Certainly, barbitol, at \$7 a pound, will produce sleep of the same refreshing character as its equivalent, veronal, at \$48 a pound.

Perhaps a hospital formulary, properly considered and adopted by the staff, would be efficacious and educational to the individual physician. A closer cooperation between physician and pharmacist possibly would be helpful.

The public will continue to ingest drugs prescribed by both physicians and lay acquaintances. Euphonious and often mysterious sounding names will still beguile the ignorant and the curious. But the hospital physician should not contribute to the increase of the evil of self-dosage or magnify the financial burden of the institution.

S. Lillian Clayton—An Appreciation

ON MAY 2, 1930, S. Lillian Clayton, superintendent of the school for nurses of the Philadelphia General Hospital, died as she had lived, at her post of duty.

On January 1, 1915, Miss Clayton was brought from the Cook County Hospital, Chicago, to Philadelphia, to become the directress of nurses of the training school of the city's institution. A graduate of the hospital of whose training school she now became the head, she was fully acquainted with the traditions and practices of this old hospital.

She had wandered far afield, however, since her graduation and had left behind her in Minneapolis, Dayton and Chicago a fine reputation as a courageous and constructive administrator of schools for nurses. Her colleagues in the American Nurses' Association and in the League of Nursing Education had bestowed upon her their highest honors. She was one of half a dozen well known and sincerely loved women in the nursing field in this and in other countries.

Her reputation was made before she returned to her Alma Mater but in the full tide of her experience and usefulness, she undertook with enthusiasm the reorganization of the school that Alice Fisher inaugurated. From a school with approximately one hundred pupil nurses and twenty graduate nurses, she developed the Philadelphia General Hospital school until to-day it numbers almost five hundred, including graduate nurses.

Many knew Miss Clayton as a splendid skilled young woman was of the finest.

J. C. D.

The Death of Doctor Rucker

AS THIS issue of THE MODERN HOSPITAL goes to press the sad news is received of the death of Dr. William Colby Rucker, who passed away suddenly on May 22.

Doctor Rucker was widely known, widely respected and justly popular in the hospital field where he will be greatly missed. He was the vice-president of the American Hospital Association and was the chairman of the local arrangements committee for the forthcoming convention at New Orleans. His kindly philosophy, broad humanitarianism and native humor won him friends wherever he went.

As a sanitarian Doctor Rucker was internationally known. He battled with disease on many fronts—east and west, north and south in the United States and in the Canal Zone and he traveled widely in South and Central American countries making sanitary surveys.

Foremost among his sanitary exploits was his gallant part in the yellow fever campaign in New Orleans. There as a young doctor he fought the deadly peril until he himself fell helpless with the disease. Recovering, he went determinedly back into the fight and worked valiantly until the epidemic was stamped out.

A few years later in San Francisco, he and Dr. Rupert Blue organized a magnificent campaign against the bubonic plague epidemic. At first meeting with public apathy and in business circles with decided opposition, these two young physicians worked day and night, finally arousing the whole city to such a blaze of enthusiasm that every possible source of infection was exterminated. Millions of rats were slaughtered before all danger was over. Later, in the mountains, while recuperating from the resulting fatigue of the campaign, Doctor Rucker discovered that squirrels, too, can carry the infection, thus accounting for some isolated cases in rural districts and bringing new light upon the transmission of the plague.

Again, in 1911, Doctor Rucker was active in the Rocky Mountain spotted fever campaign in Victor, Mont.

While Doctor Rucker was a man of action he somehow found time to keep abreast of the intellectual developments of his profession. He was a student and research worker who contributed many articles and bulletins on public health subjects, covering original work in the epidemiology of the communicable diseases.

He was detailed to American Expeditionary Force work in 1918 and served until June, 1919. Following that he was chief medical adviser of the Bureau of War Risk Insurance, Washington, D. C. From 1920 to 1924, he was chief quarantine officer at the Panama Canal. Since 1925 he



William Colby Rucker (1875-1930)

has been in charge of the U. S. Marine Hospital No. 14, New Orleans.

Doctor Rucker was born September 28, 1875. He was educated at the University of North Dakota and the University of Minnesota, where he was graduated in 1894. He was a graduate of Rush Medical College, Chicago. He was buried with military honors in Arlington National Cemetery on May 26.

Doctor Rucker was a valued member of the editorial board of THE MODERN HOSPITAL and his writings appeared in every volume of the magazine over a period of many years.

YOUR EVERYDAY PROBLEMS

A department devoted to the informal discussion of problems arising in the everyday life of the hospital superintendent.

[No attempt has been made to offer final conclusions relative to the questions considered in this department. THE MODERN HOSPITAL will gladly welcome further comment by its readers on any of these problems or the presentation of other queries for discussion in later issues.—Editor.]

What Is to Be Done About the Questionnaire Nuisance?

The trend of the times seems to be that when any information is desired by foundations or even by committees of national hospital and surgical associations a lengthy and often exceedingly complicated questionnaire is broadcast throughout the hospital field. Many a superintendent in the course of a busy day has been forced to a point of extreme irritation by the receipt of a lengthy questionnaire.

Some executives consign all questionnaires without mercy to the waste basket. Others select those for answer that can be more easily and briefly executed. It cannot be gainsaid that it is possible for a useful and efficient policy to degenerate into a fearful nuisance. But it is not a proper plan for any superintendent to refuse to answer all such questionnaires. There should be some distinction between those that are worthy and those that represent but a kind of personal inquisitiveness. The seeker after personal prominence after preparing his questionnaire expects others to furnish information that will be useful in writing an article for publication.

Forms coming from hospital and surgical associations with bona fide requests for information which will later be of use to hospital superintendents should assuredly be answered. Only information that is accurate should be supplied and not, as is so frequently the case, statements that represent suppositions rather than those based on fact. Perhaps the pendulum which has been swinging toward the multiplicity of questionnaires will return soon to a rational use of this valuable means of securing statistics upon such useful subjects as hospital costs, income and procedures.

What Should Be the Attitude of the Hospital Towards Women Doctors?

The woman physician has slowly but steadily taken her place as a member of the healing profession and she is knocking at the doors of many of our country's institutions seeking an opportunity to complete her medical education. There are still found many superintendents who persistently avoid the admission of women doctors to their intern staffs. Their minds are not open to argument and they fear the disrupting influence of the presence of women physicians in their institutions.

In this day and age it would appear unfair to militate

against the woman doctor because she is a woman. On the other hand, unless she is willing, irrespective of her sex, to perform every duty that falls to the lot of the male physician, the doors of our hospitals should not be open to her. She should not be a person to be socially entertained by the male members of the intern staff, or one whose hospital life should be rendered easy by excusing her from such duties as attendance upon male patients, no matter from what form of disease they suffer, the carrying of one end of a stretcher if necessary and meeting the hundred and one obligations that rest upon the shoulders of interns everywhere.

The woman doctor who expects to be coddled because she is a woman has no place in the practice of medicine. If, however, she intends to take her place on the intern staff and command and secure respect as a physician equal in attainment and skill to any other, she deserves recognition. There is no place in the country's hospitals for the woman physician who cannot demonstrate that she is more a physician than a woman and is willing and able to enter into competition with other interns around about her.

How Many Private Beds Should a Working Community Hospital Have?

This question has been asked THE MODERN HOSPITAL by the superintendent of a hospital in an Eastern industrial city having a population of 10,000. She supplies the information that the clientele of her institution consists largely of working men and women who can be classified as representing the lower middle class.

In planning an institution, it is a wise step first to survey as accurately as possible the community needs to be met. It would be most unwise to construct a hospital with many high priced rooms to meet the requirements of such a community as this. Moreover, it would appear that the trend in the construction of institutions nowadays is toward the building of ample facilities for the care of ward patients. There is, however, a distinct and decided need for two and four-bed semiprivate wards that can be rented at from \$4.50 to \$6 a day. Indeed, one observes less often than formerly the twenty-five or thirty-bed wards that were so frequently built into the hospital of a quarter of a century ago.

It is often computed in constructing a general hospital that about one-half of the beds shall be above the public ward grade, although no hard and fast rule may be laid down in this matter. In investigating the economic possibilities of communities generally such basic factors as the average income and size of families, the confidence in which the hospital is held generally and the excellence of the service offered by members of the local medical profession, all have their effect in determining the probable ratio between private, semiprivate and ward patients.

No institution, for example, of a hundred beds should be constructed without its possessing a certain percentage of private rooms which range in price from \$6 a day upwards. In a working community, it would probably be justifiable to allot about one-fifth of the bed accommodations to private patients. Perhaps from 30 to 40 per cent of the total group might be placed in two and four-bed wards and the remainder in public wards of from eight to twelve beds.

The adequacy of the nursing facilities in any hospital will determine in no small measure the type of facilities to be provided. There is an inverse ratio between the size of ward units and the cost of satisfactorily nursing patients therein. It is a wise procedure, if possible, early to approximate the income that will be available to support the hospital when once it is thrown open to the public. An institution with a considerable income from endowments can better afford to allow private facilities to remain inactive than one that must depend fully for its support on its earnings and contributions from the community.

If ward beds are to be largely free, then the institution must look to its profits from private rooms to aid in bearing the expense of such work. Private and semi-private facilities should not represent a financial liability to the hospital but should in varying degrees return a profit. *THE MODERN HOSPITAL* advises this inquiring superintendent to use the experience of her own and other community institutions near-by as somewhat of a guide in estimating the probable income of the new institution.

Each hospital, therefore, is a law unto itself and should be constructed as flexibly as possible so that in times of financial drought due to industrial depression or other local conditions, the hospital's facilities can be so altered as to render the greatest service to the community and at the same time earn as great a financial return for this work as is possible.

Should Gifts of Equipment Be Given a Money Value and Carried on the Institution's Books?

The computation of the per capita cost in most hospitals is a most uncertain procedure. The various factors that form an important part of the arithmetical estimation of the cost to the hospital for the care of each patient are subject to such variation that, even though the superintendent is conscientious in his attempts at accuracy, he consciously or unconsciously omits items that alter the final computation.

Most hospitals have at some time during the year one or more donation days. Sometimes the gifts received consist of money and sometimes they are largely commodities of more or less definite value. In rural communities these donations are likely to represent food products such as jellies, vegetables and other usable articles, while in metropolitan areas furniture, linen and even surgical supplies and equipment may constitute these gifts. If the per capita cost of hospital work is to be accurate (and no institutional, financial or statistical statement should be published unless every effort has been made to make it so), a true statement of all of the hospital's income for the year must be used in arriving at this figure. When one justifies a deviation from the actual truth because it represents but a minor receipt or expenditure, the whole foundation of the hospital's bookkeeping begins to totter. One might just as well expect to omit the depreciation on property or the cost of outfitting a new hospital department as deliberately to omit an attempt at placing

a fair valuation on all the gifts that the hospital receives.

It may be said, therefore, in answer to this inquiry which came from the superintendent of a small Eastern institution, that it is the belief of *THE MODERN HOSPITAL* that an effort should be made to credit the institution with the receipt of all donations of whatever size. Unless this is done, the per capita cost submitted to the board of the hospital and to the public becomes a mere estimate instead of an accurate financial statement.

What Is to Be Done With the Medical Director Who Does Not Direct?

The medical director of the hospital is expected to perform all the duties his title implies.

He is responsible for the preparation of medical policies for the approval of the institutional board of trustees, for the enforcement of rules covering the medical conduct of the institution and for the general supervision of the work performed by members of the resident and visiting staffs. He is expected to obviate the difficulties that have arisen in the past relative to a certain reluctance on the part of physicians to receive instructions from a lay superintendent. It is he who sees that dispensary physicians report on time, that operations scheduled for a definite hour begin at that hour and that efficiency and lack of friction characterize every angle of the hospital's medical work.

The lay superintendent who asks the foregoing question was greatly concerned as to her method of procedure when inattentance and careless service characterize the work of dispensary doctors. She explains that at times a dispensary hour will arrive with no physician in attendance to begin work. After half an hour has elapsed it is her custom to call the medical director and inform him of her difficulty. But this executive is apparently inattentive and for some reason, sufficient or otherwise, hesitates to call to the attention of the individual physician the fact that he is not doing his duty. The superintendent is then uncertain as to the wisdom of pressing the medical director for action when the difficulty is not promptly remedied.

Such a situation would not be serious if it were not so frequently observed. A medical director who fears to offend a colleague by insisting that he efficiently perform his work is not the proper person for his position. A lay superintendent is rather powerless to act after she has once reported such matters to the director of medical affairs. It would seem that the board of trustees should in some way be informed concerning this difficulty. If the superintendent is subordinate to the medical director such a procedure becomes difficult. On the other hand, if the superintendent reports directly to the board of trustees, it is her duty to inform her superiors as to such lack of attention on the part of staff members. Such an impasse only arises when an ineffective or indefinite chart of organization has been placed on the walls of the institution. This statement, of course, takes for granted that every modern hospital should have some visible representation of its organization.

Perhaps in the institution mentioned here, before any drastic measures are taken the superintendent should discuss with the medical director behind closed doors the ill effects resulting from the careless and inefficient work on the part of physicians assigned to the dispensary. If this does not bring results it would seem advisable for the matter to be brought officially to the board of trustees for action.

NURSING AND THE HOSPITAL

Conducted by M. HELENA McMILLAN, R.N.,
Director, School of Nursing, Presbyterian Hospital, Chicago

What Wisely Planned Assignments Mean to Student Nurses

By BARBARA A. THOMPSON, R.N.

Superintendent of Nurses, Minneapolis General Hospital, Minneapolis, Minn.

DEBORAH Machurg Jensen, assistant to the director, school of nursing, Barnes Hospital, St. Louis, in her article on case study¹ says that "the purpose of case study is to develop in the student an attitude of mind toward her clinical experience in the hospital so that each patient comes to mean more to her as she realizes the importance of studying the social history and background as well as the medical history and the reaction of one on the other." This is the answer to the student's remark, "Oh, I will be glad when I am assigned to a new department because I will be learning something new."

We all know that the nursing care of the patient is first and foremost, but that the care of the same patients over a long period of time does become monotonous unless the student's interest is kept stimulated by the linking together of her classroom teaching and her ward practice. I am reasonably certain that the greater number of students on the wards, unless they are encouraged to study their patients from many angles, merely work to care for their patients and to cover their daily assignment. We all know that pressure of work is, in part, responsible for this. An intelligent understanding of the patient by the student, however, will encourage more efficient service in every way, and the student will not always have that constant feeling of being pushed. To accomplish this there must be careful supervision which must be provided by nurses who are prepared to teach and who are not already overloaded with administrative duties.

One of the first essentials in the development of case study is to organize the assignment of work so that all students have equal opportunities. The necessity for changing some students oftener than others may be greater, but in all probability the changing would not depreciate the nursing care because there are always some patients with minor ailments. Following are some of the points to be taken into consideration by the head nurse when she is assigning her students to their work:

1. No student should be assigned to a group of patients over a long period of time unless the care of them

is of value educationally; neither should she be changed so frequently that she does not have the opportunity to study her patients and their treatments.

2. There should be something of educational value in every service, but there are some services that cease to be educational after a given period of time—for example, a floor diet kitchen where only general trays are prepared.

3. As far as possible a student should be assigned the entire care including medicines for and treatments of the same patients during her time on duty. The period of time that she cares for the group depends upon the type of patient it includes.

4. All patients on the floor should be definitely assigned by the head nurse or by the nurse in charge. There can be an unnecessary waste of time by two nurses on the ward if the one nurse has to interrupt her work and give the assignment to the second nurse. Students show more interest if they are given a definite responsibility instead of "just helping someone else." Furthermore, the head nurse should give the student the necessary information about each patient, such as diagnosis, treatments and medications. The student should, however, read the orders before giving any treatments or medications.

5. Every effort should be made to assign only what the student will be able to finish in a given length of time. If emergencies arise that delay the student so that she is unable to complete her work, a reassignment should be made by the head nurse.

In order to give intelligent nursing care, the emphasis of the assignment should be, as Bertha Harmer, director, school for graduate nurses, McGill University, Montreal, in her book on "Methods and Principles of Teaching" says, "with the patient as the center of thought instead of having the thing to be done the center of thought." This is, as we all know, difficult to maintain because the community has not yet evolved a plan that will relieve the hospital so that it is not wholly dependent upon the students for the entire nursing care of the patient. Several solutions to the problem have been suggested, one of which is to employ graduates to supplement the student help. Not only would the education of the student be more adequately taken care of, but there would also not be the usual

¹ Case Study at the school of nursing, University of Minnesota, American Journal of Nursing, June, 1928.

	1929												19		
	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Arnold, D.	4MS	15WS	11Vac	1MM	1WM	1DK	1DR		1DR	1MM	1WM	N.D. 15WM	N.D. 15MS	15Obst	
Bell, M.	4WS	15MS		1WM	1MM	1DR		1DR	1Vac	1Ed			1Obst		
Carr, S.	4MM	15WM		1MS	1WS	1Ed			1Vac	1DR		1DR	1DK	1MM	N.D. 15
Jones, H.	4WM	15MM		1WS	1MS	1DR		1Vac	1DR	1Ed			1Con	15	

Chart I.

scarcity of nurses during class hour. In addition, employment would be provided for the large number of graduates who are good bedside nurses but who are not good executives. This would decrease the large number of nurses registered for private duty, would afford a livelihood for all and would place the nurses where they belong.

If our graduates are unable to secure employment after they are graduated because the private duty field is overcrowded, why do we admit and keep so many students? Paul Fesler, superintendent, University of Minnesota hospitals, Minneapolis, in his article in the January number of *THE MODERN HOSPITAL* says that graduate nurses are less expensive than students. If this is true, why does every hospital, whether in large cities or small communities, insist that it must have more students, that it cannot employ graduates. If Mr. Fesler is correct, one educational problem is partly solved. We need not maintain such large schools, we shall have better students and fewer and we shall be giving employment to the ones we have already graduated.

The fact has been impressed upon us that if a hospital has a given number of nurses to a given number of patients it is considered adequately staffed. This may be correct in part; but not all factors are taken into consideration. It is no doubt true that the work can be done, but can the student give intelligent nursing care if the proportion of nurses is going to be entirely on this basis? The three factors I shall discuss in relation to intelligent nursing care and to the assignment of nurses are: the

demands on a nurse's time, the types of patients and the types of nurses.

The demands on a nurse's time are much greater today than they were ten years ago. To-day, a great many more tests and examinations are made on patients before a final diagnosis is made. How does this affect the time of the nurse? In this way: Every time a call comes to send a patient to the x-ray department, to the operating room or to the cardiogram room, a nurse is required to leave what she is doing, get the patient ready and, in many instances, accompany the patient. This may happen several times in one morning unless the assignment of patients is carefully made.

What Is a Fair Distribution?

There are also the various types of patients. Each patient must be treated as an individual. For example, take two patients who have been operated on for appendicitis: the first may require the average amount of time for morning care, while the other, a nervous, irritable person, demands twice the amount of attention and time. It is, therefore, necessary for the head nurse to make assignments so that the same nurse will not be given too many patients of the second type. It is not a fair distribution, either, for the nurse who is posted to go off duty at nine to be assigned the same number of patients as the student who is on duty until twelve.

The nurse, too, is an individual. No two nurses are alike. Some are slow, some are rapid, some are efficient,

WOMEN'S MEDICINE.

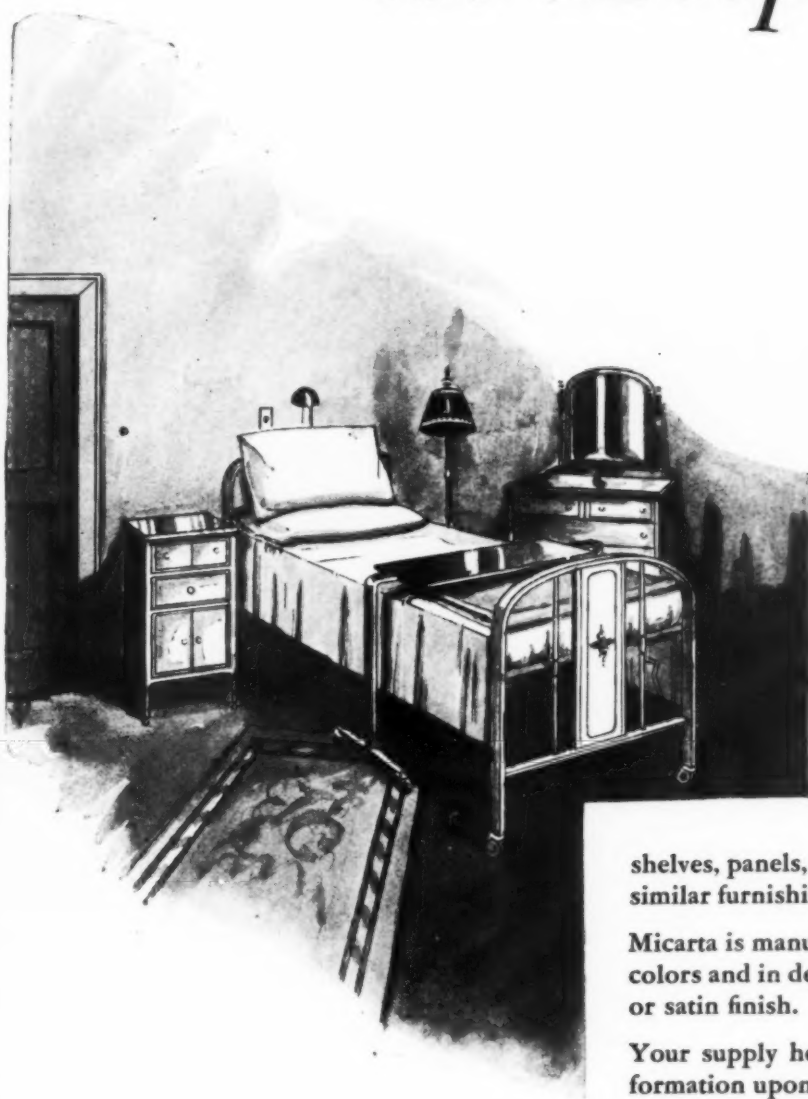
	1930														
	June	July	Aug.												
Bell, M.	15WS	15WS	15DR												
Carr, S.	15WS	15WS	15WS	14-6											

Chart III.

MICARTA

in

the Hospital



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TUNE IN THE WESTINGHOUSE SALUTE OVER THE N. B. C. NATION-WIDE CHAIN EVERY TUESDAY AT 10:00 P. M., E. S. T.

PEDIATRICS.

1930												1930				
Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Seniors																
20 Bell			20 Ellison			20										
1 Nelson			1 Carlson			1										
	1 Brown			1												
		15 Jones			15											
		1 Nelson														
Juniors																
15 Howe			15 Blank			15										
	1 Black			1 Clark			1									

Chart II.

some are inefficient, some take responsibility and some shirk it. What can we do to remedy this situation? Not much, except to choose our applicants more carefully, and later to eliminate those who are not measuring up to the standards. In spite of this care we will have nurses on the wards who are poor bedside nurses but who are good executives, and *vice versa*. Yet during their three years' service they are expected to carry the same load

as the ones who are good in both types of service, as well as efficient in various other ways. Therefore, if the department is understaffed or staffed with the same type of nurses or nurses from the same class it is going to be difficult to lose sight of the thing to be done. The result will be mechanical nursing instead of intelligent nursing.

Just a few days ago I was trying to ascertain why a certain ward was being so inefficiently managed and I

10	Date	Jan 5-12 1930		Assignment Sheet				Floor 3			
Mon		Miss Graduate	Miss Senior	Miss Senior	Miss Junior	Miss Junior	Miss Junior	Miss Freshman	Miss Freshman		
		Hr 9-1 CI	Hr 1-5 CI	Hr 11-3 CI	Hr 11-7 CI	Hr 9-7 CI 4-6	Hr 9-7 CI 4-6	Hr 1-5 CI 10-12	Hr 9-7 CI 10-12		
	A	Ward 1 1. Mr. Macy 2. Mr. Doe 3. Mr. Flea	Ward 1 1. Mr. Murphy 2. Mr. Bird 3. Mr. Brown 4. Mr. Green 5. Mr. Black	300 - Mr. Johns 302 - Mr. Martin Dressing Room.	303 Mr. Lee 304 Mr. Donley Supervision of linen room.	Ward 4 4. Mr. Foley 5. Mr. Jones 6. Mr. Green 7. Mr. Davis	Ward 4 1. Mr. Johnson 2. Mr. Solid 3. Mr. Brown 4. Mr. Rust	Ward 8 8. John Dodd 9. Mr. Roe 10. Mr. Graham Supervision of dormitory.	Ward 5 5. Mr. Heese 6. Mr. Mar H		
	M	Charge above patients	Above and group 4	Above and groups 4, 5, 7 to 5.		Above and groups 3 & 7.	Above and groups 2 & 8.	Above and groups 5.	Above and groups 2 & 6.		
	P										
	M										
		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
	M										
	Tue		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	
A											
M											
P											
M											
		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
A											
M											
P											
M											
Wed		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
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		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
	M										
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Thu		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
	M										
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		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
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Fri		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
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		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
	M										
	P										
	M										
Sat		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
	M										
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	M										
		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
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	P										
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Sun		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
	M										
	P										
	M										
		Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI	Hr CI		
	A										
	M										
	P										
	M										

Chart IV.

The construction of a canal across the Isthmus of Panama to connect the Atlantic and Pacific Oceans, was initiated by the United States in 1904 with the signing of a treaty with the Republic of Panama. General George W. Goethals was ultimately placed in charge. The Canal was completed under his management, and opened to navigation in 1914. The Canal is 50.45 land miles long; a total of 53,246 commercial toll-paying vessels have passed through up to June 30, 1929.



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Floor Station B Date June 5-12 1930

Name	Mo	Tu	We	Th	Fr	Sa	Su	Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Miss Graduate								A M	Mrs. Blank	Mrs. Blank					
Hours	8-12	1-5	8-12	1-5	8-12	1-5			Mrs. Tobl	Mrs. Tobl					
Classes															
								P M	Charge	Charge					
									Mrs. Blank	Mrs. Blank					
									Mrs. Tobl	Mrs. Tobl					
Miss Senior								A M	Mrs. Abbey	Mrs. Abbey					
Hours	8-12	1-5	8-12	1-5	8-12	1-5			Mrs. Henry	Mrs. Henry					
Classes									Mrs. Thurn	Mrs. Thurn					
									Charge work	Charge work					
								P M	Above	Above					
Miss Senior								A M	Mrs. Meade	Mrs. Meade					
Hours	8-12	1-5	8-12	1-5	8-12	1-5			Dressing room	Mrs. Ball					
Classes									Mrs. Tilly	Mrs. Tilly					
								P M	Mrs. Meade	Mrs. Meade					
									Mrs. Hall	Mrs. Tilly					
									Mrs. Ball	Mrs. Dodd					
									Mrs. Carr	Mrs. Carr					
Miss Junior								A M	Mrs. Johnson	Mrs. Johnson					
Hours	8-12	1-5	8-12	1-5	8-12	1-5			Mrs. Tarrant	Mrs. Tarrant					
Classes									Mrs. Tarrant	Mrs. Tarrant					
								P M	Above	Above					
									Mrs. Hall	Mrs. Tilly					
Miss Senior								A M							
Hours	8-12	1-5	8-12	1-5	8-12	1-5									
Classes															
								P M	Patients of Nurses on duty	Patients of Nurses on duty					
Miss Freshman								A M	Mrs. Tilly	Mrs. Tilly					
Hours	8-12	1-5	8-12	1-5	8-12	1-5			Mrs. Dodd	Mrs. Dodd					
Classes									Mrs. Carr	Mrs. Carr					
								P M	Above						
									Miss Tule						
Miss Freshman								A M	Miss Tule	Miss Tule					
Hours	8-12	1-5	8-12	1-5	8-12	1-5			Mrs. Hall	Mrs. Hall					
Classes									Mrs. Ball	Mrs. Ball					
								P M		Above					
									Mrs. Ball	Mrs. Tilly					

Chart V.

needed only to look at the group of nurses assigned to that ward—a group that was too good to be eliminated, but also too poor to have all in one place—to reach a decision. How can we completely solve the problem if we are always dependent upon students to care for the patients? The patient is our first consideration and there is always the "thing to be done" unless hospitals can in time see the possibility of a school of nursing as a part of the hospital without necessarily being wholly dependent upon it for the nursing care of its patients.

In order more carefully to select students being assigned to wards and special departments and to prevent the congestion of which I have just spoken I have in my office a chart on which I place the time of each student for three years. I can see at a glance the record of the class as a whole, as individuals, the work they have done, and the adjustment that may be necessary in case of illness, cancellations or absence. A part of the chart, illustrated by Chart I, is shown here.

In planning the time of the students for three years I have a chart of each ward and special department which is divided to show the number of seniors, juniors and other students. First, I ascertain the number for each ward or special department, and the number of each

class necessary in each ward or special department. This number varies according to the total number in the class. If a student becomes ill or is absent, I do not replace her until her term of service is finished unless it is absolutely necessary. In that event, I replace her with a student of the same class who may have lost time during her time on the service, or one who has requested additional experience in that department. Usually, the gap may be filled by one who has lost time. For example, Miss Blank is scheduled for pediatrics from June 1 to September 1. She becomes ill August 15. From August 15 to September 1 the space is left vacant, unless Miss Blank returns before September 1, or it is filled, if possible, by a substitute in the manner that has been suggested.

Miss Blank will, in turn, at some later date be given the time she has missed either as a substitute or as an extra nurse. Whereas if Miss Blank reported back to the department September 1, she would displace the student who was scheduled to follow her on September 1, thus upsetting the time of the students all along the line. Readjustments for a number of students are more difficult to make than the

adjustment for one student. There are disadvantages to this scheme, which, even though I can see them, I have not at this time space to enumerate. The advantage of having all students' time planned for all the experience we agree to give them far outweighs the interruptions that may be caused by illness or absence. The possibility of a student's reaching the end of her senior year minus an experience, such as diet kitchen or dispensary, is eliminated.

Chart II shows the organization of one department.

Estimating the Hours of Nursing Care

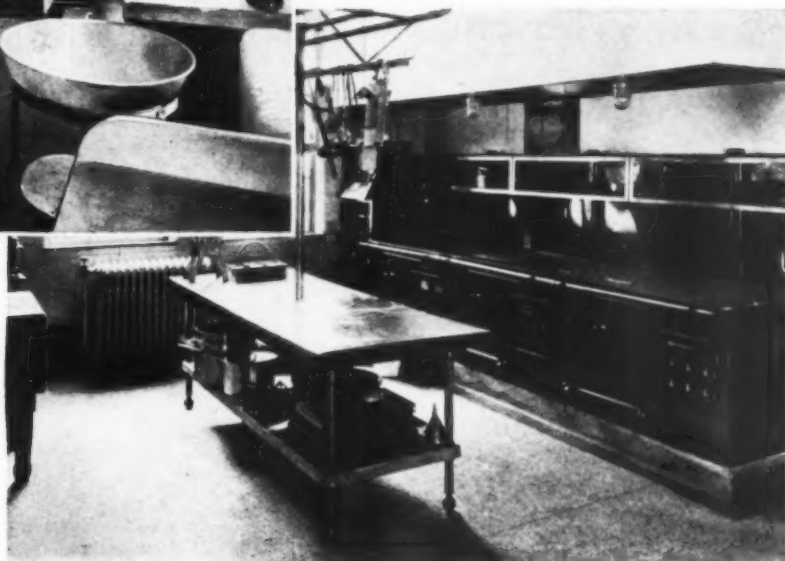
After the assignment has been made in the office, the assignment on the floor is of next importance. Charts IV and V illustrate two assignment sheets. Chart IV was planned by Helen Torgerson, a graduate of Eitel Hospital, Minneapolis, and a student in the course in supervision and teaching at the University of Minnesota. Chart V was planned by me with the assistance of supervisors and head nurses at the Presbyterian Hospital, Chicago. It is now being used on the wards of that hospital.

The following outline is offered in explanation of the assignment sheet illustrated in Chart V.

Women's surgical ward of twenty patients: on duty—



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head nurse, graduate, two seniors, two juniors and two freshmen. There may or may not be preliminary students on duty. I have not included them because the number usually varies, and because I wanted to show the number necessary from the other classes to take care of the floor. I have arrived at my number in the following way:

Class	Hour	P. M.	Hours on duty
1 graduate	.....	2	48
1 senior	.....4	2	44
1 senior	.....4	2	44
1 junior	.....4	2	44
1 junior	.....4	0	52
1 freshman	.....4	2	44
1 freshman	.....4	2	44
1 senior or junior N. N.	4	0	56
Hours a week			376

The hours of nursing care estimated for each patient: one hour for the bath and morning care, and one-half hour for evening care; the other hour and a half for care during the rest of the twenty-four hours—3 hours x 20 patients x 7 days=420 hours for the week. I have arbitrarily taken three hours a day for each patient. My figures are not based on actual time studies made. I am, as you will note, fifty-four hours short of the necessary nursing hours. I could do two things: either add one more nurse, or take into consideration that not all of twenty patients will need three hours a day of nursing care. I did not make any allowance for patients cared for by special nurses. Some one will no doubt ask, "Who does the cleaning of service rooms?" There is little in this work of educational value to the nurse. She can learn the necessity for cleanliness of utensils, during the preliminary term by doing some of that work at that time. I have, therefore, assigned this work to maids. They are cheaper than nurses.

Looking Toward Ideal Assignments

The assignment is by case method only, each nurse having the full care of patients assigned to her while she is on duty. The hours posted are off duty hours, and the junior posted off duty from 9 a.m. to 1 p.m. and 5 p.m. to 7 p.m. is on duty from 7 to 11 p.m. Whether one night nurse is sufficient is a debatable question. Except in instances where there are too many seriously ill patients, I believe one is enough if she has the help of a competent maid. The student on until 11 p.m. gets no half days until the end of that service, which varies from a month to six weeks. The accumulated half days are totaled into whole days. The night nurse is allowed days off in the same way. Class hours are hours on duty. The graduate is on duty when the head nurse is off. One senior nurse, and if possible one who has shown executive ability, although not given all the experience and instruction she should have toward preparation for a head nurse, is given as much as possible. There is also a teaching supervisor who usually has more than one group of patients. She is not, however, responsible for the administration of the floor except to teach and suggest the most efficient methods of administration.

I have endeavored to point out certain facts in the assignment of students and to show forms that can be used to aid in these assignments, the skeletons of which might be adjusted to suit individual hospital situations. To have ideal assignments we must have, in addition, sufficient supplementary graduate help so that the attention may be directed toward the "patient as the center of thought, instead of the thing to be done."

This Hospital Fosters a Public Health Nursing Service

A public health nursing program that is an integral part of the hospital organization has been functioning successfully at the Englewood Hospital, Englewood, N. J., for the last six years, according to the *Public Health Nurse*.

A group of agencies, each doing different phases of public health nursing in the Northern Valley of New Jersey, decided to unify their services through Englewood Hospital. The district now has a valuable public health nursing service and a hospital that is a real health center. The hospital is a radiating point from which public health nurses go into the homes of the community, giving bedside care or making advisory visits as the case may be; it is a place where clinics and hospital social service are coordinated and where practical preventive health work is stressed.

The new organization is called the public health nursing out-patient department. While the work is a single unit, it is in reality three services—public health nursing, clinic service and hospital social service—welded together. The staff consists of a director, a staff supervisor, a social service nurse, a clinic supervisor, nine staff nurses, one nurse, technician (physiotherapy clinic), five students nurses (three months' training each), one office secretary and two clerical workers.

Some of the advantages of the plan as pointed out by the article are:

To the hospital or clinic patients it offers a continuous service with no gaps and more intelligent care, either general or advisory, because of more definite knowledge available to the nurse.

To those patients who are not and never will become clinic or ward patients, there is the background of a large institution where all people accept service, the patients who pay private rates, down through to those paid for by the county, and there is no smack of charity in accepting public health nursing from a hospital.

With a working knowledge of the clinics, days for different clinics, hours and eligibility of the patient for admission to the clinic, the nurse gives more exact information and patients are saved needless visits.

How the Staff Nurse Benefits

To the staff nurse, the plan offers certain educational advantages in the close contact with the hospital and the new methods based on ever changing medical knowledge. It gives the satisfaction of seeing a case through. Also through hospital follow-up, a contact with many homes brings a wealth of advisory work that usually comes rather slowly. For instance, all patients applying for maternity service to the hospital are admitted through the prenatal clinic, and at the same time are automatically admitted to the public health nursing service for home visiting.

To the hospital the value of such a department is that it carries the hospital into the community, supplementing care given in the wards, and by a consistent follow-up saves needless loss of hospital treatment and also lessens the number of "repeaters," that is, patients, who, going home to the same manner of living, slide back and return again. Through home contacts, the nurses, as representatives of the hospital, are able to explain misunderstandings, correct erroneous impressions and foster in the community a feeling of confidence and of pride in the hospital.

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NEWS OF THE MONTH

New York Meeting Attracts More Than 200 Delegates

MORE than two hundred persons registered and were present at the sixth annual conference of the Hospital Association of the State of New York, which was held May 8 and 9 at Coney Island.

Dr. C. W. Munger, president of the association, opened the meeting with the presidential address, which was followed by several reports. Boris Fingerhood, superintendent, United Israel-Zion Hospital, Brooklyn, presented the secretary's report, in which he advocated the establishment of an official bulletin of the association which would probably make its appearance in the Fall. This bulletin would contain news and information, particularly as to state legislation, that would be distributed to the members of the association only. Secretary Fingerhood also advocated the establishment of a new legal holiday in the State of New York, to be known as Health Day. He stressed the point that the setting aside of one day each year at which time all citizens of the state would give attention to their well-being, particularly with regard to a physical examination, would be a most worthy object. Mr. Fingerhood mentioned that this day could be the same as National Hospital Day, which is on May 12, and this was pleasing to the membership. Discussion of this subject by members brought forth the fact that this was the first constructive use of a hospital day that had been suggested and the association went on record as being in favor of the movement.

Doctor Conley Presents Report

Dr. Walter H. Conley, New York City, chairman of the legislative committee, presented his report in which he first discussed the lien law that is now before the legislature. He also mentioned a bill that had been introduced in the assembly through which hospitals would be able to collect for bills for deceased patients through the surrogate much the same as the undertaker now does. He reported another bill introduced in the senate and passed which carries an appropriation of \$27,000, this money to be used for the hospitalization of the state and Indian poor.

An important bill that was considered last year but failed to pass because of the lateness in which it was introduced pertained to the licensing of hospitals. The bill as it will be presented at the next session of the legislature makes it mandatory that all hospitals, particularly proprietary hospitals, must obtain licenses and will be subject to inspection under the jurisdiction of the State Department of Social Welfare. The work of the legislative committee of the New York Association is far ahead of that of other state associations and Doctor Conley was commended for his excellent services.

Following the first session a luncheon was given by the Coney Island Chamber of Commerce. Dr.

Christopher G. Parnall, superintendent, Rochester General Hospital, and president, American Hospital Association, presided at the afternoon round table at which four interesting papers were given. Dr. John Osborne Polak, Long Island College Hospital, Brooklyn, presented the first, which dealt with histories and their preparation. The second was a discussion of blood transfusions and donors, presented by E. H. L. Corwin, New York Academy of Medicine, New York City. The third paper was pre-



Dr. Walter H. Conley, chairman of the executive committee.

sented by Louis Frank, superintendent, Beth Israel Hospital, New York City, in which he dealt with the relation of the superintendent and the house staff and presented new ideas on intern training. The last paper was presented by Dr. Joseph Tenopyr, Brooklyn.

Clarence E. Ford, Department of Social Welfare, Albany, presided at the Friday morning round table. The first paper was given by V. A. Zimmer, director, Bureau of Workmen's Compensation, New York City, on "Workmen's Compensation and the Insurance Carriers."

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News of the Month

So much interest was shown in this topic that more than an hour was devoted to its discussion. Every phase of workmen's compensation was discussed. James U. Norris, superintendent, Woman's Hospital, New York City, gave some interesting ideas on the selection and organization of hospital personnel. Mr. Norris showed that he had an unusually loyal staff of assistants and that there had been few changes in his institution. A discussion followed on whether maintenance was a factor in securing the best type of help.

The third paper was "Budget Making for the Hospital," presented by John A. McNamara, executive editor, *THE MODERN HOSPITAL*. This was followed by a paper by Dr. Malcolm T. MacEachern, associate director, American College of Surgeons, on "The Ratio of Hospital Personnel to Bed Capacity in the General Hospital." Doctor MacEachern has prepared some very interesting figures which are believed to be the first official figures that have been obtained dealing with this important topic. His conclusions were reached after a study of more than a thousand hospitals, all of them approved by the American College of Surgeons. The last paper was presented by Dr. Norman E. Titus, New York City, and dealt with physical therapy and its place in a general hospital. Doctor Titus showed how this therapeutic aid should supplement other departments of a hospital.

The nominating committee, which reported in the afternoon, recommended Sheldon L. Butler, superintendent, Long Island College Hospital, Brooklyn, for president. He was elected. Other officers chosen were: first vice-president, Carl P. Wright, Syracuse General Hospital, Syracuse; second vice-president, Theodora S. Root, New York Orthopedic Hospital, New York City; treasurer, P. Godfrey Savage, Niagara Falls Memorial Hospital, Niagara Falls; secretary, Boris Fingerhood, United Israel-Zion Hospital, Brooklyn. A report of the nursing committee was also received. This was followed by a round table session at which Elizabeth A. Greener, director of nursing service, Mt. Sinai Hospital, New York City, presided.

Two papers were presented. The first one was given by Dr. C. G. Scherf, superintendent, Coney Island Hospital, and discussed the relation of the superintendent of nurses to the superintendent of the hospital. The second and last paper was presented by Cornelius S. Loder, New York City, in which he showed the value of cubicles to the patients and the hospital.

The business session, which was scheduled for Saturday morning, was held on Friday afternoon thus eliminating the third day of the meeting. The report of the committee on resolutions was held, and the new officers of the association introduced.

Hospital Social Workers Complete Plans for Annual Session

Social service workers from hospitals in every part of the country have completed their arrangements to attend the nine-day session of the American Association of Hospital Social Workers to be held in Boston beginning June 6. Programs have been printed and distributed, giving the daily schedule. Papers will be given by social workers whose accomplishments are widely known.

Among those who are scheduled to appear on the program are: Edith Baker, president of the association, director of social service, Washington University Dispensary and Allied Hospitals, St. Louis; Bess M. Medary, Rhode Island Hospital, Providence; Lena R. Waters, University Hospital, Philadelphia; Dorothy Ketcham, University Hospital, Ann Arbor, Mich.; M. Antoinette Cannon, New York School of Social Work; Ruth T. Borette, Strong Memorial Hospital, Rochester, N. Y.; Elizabeth G. Goheen, Cancer Institute, New York City; Frances Money, University Hospital, Minneapolis, Minn.; Constance W. Webb, University Hospitals, Cleveland; Amy G. Smith, Massachusetts Eye and Ear Infirmary, Boston; Ruth E. Lewis, Barnes Hospital, St. Louis; Fanny Lissauer, Mt. Sinai Hospital, New York City; Elizabeth W. Nairn, Vanderbilt Hospital, Nashville, Tenn.; Mabel R. Wilson, Children's Hospital, Boston; Hilda C. Baker, New York Nursery and Child's Hospital, New York City; Ida M. Cannon, Massachusetts General Hospital, Boston; Edith J. McComb, St. Christopher's Hospital for Children, Philadelphia.

\$1,150,000 Asked for New Seattle General Hospital

A campaign for \$1,150,000, is now in progress in Seattle, Wash., for a new Seattle General Hospital. The appeal for subscriptions will be made on the basis of the hospital's thirty-six years of service to the community in and around Seattle. Ninety-seven of the leading physicians and surgeons of the city, who comprise the medical staff of the hospital, declare that the new hospital is a necessity.

Connecticut Spring Meeting Is Well Attended

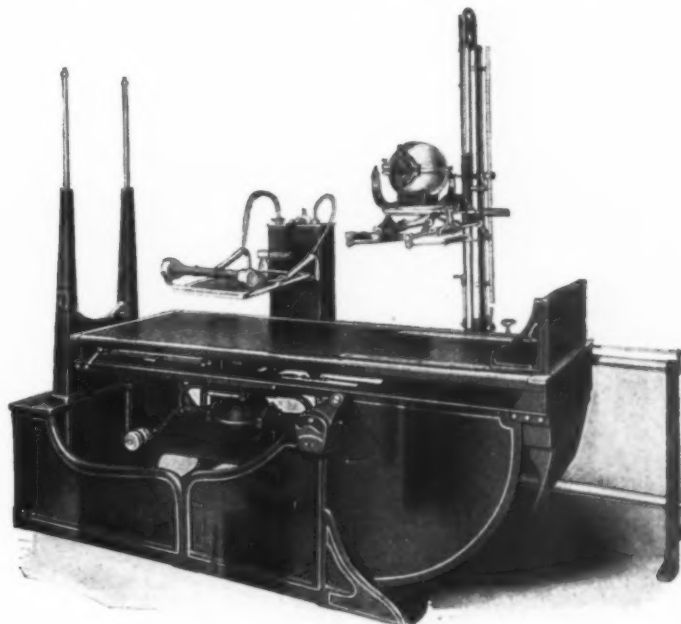
A splendid, well attended meeting was held at Norwalk on May 7 by the Connecticut Hospital Association.

The morning session was given over to three speakers and the afternoon was taken up by a discussion of the papers read in the morning and by a round table. The first speaker at the morning session was Dr. Malcolm T. MacEachern, associate director, American College of Surgeons, who talked upon the educational and service standards in the hospital. Doctor MacEachern explained what the three national organizations were doing for better hospitalization and how they cooperated. The second paper discussed the annual report, and was presented by John A. McNamara, executive editor, *THE MODERN HOSPITAL*. The last paper was presented by Matthew O. Foley, editor, *Hospital Management*.

Following luncheon Dr. T. Eben Reeks, superintendent, New Britain Hospital, discussed Doctor MacEachern's paper, Dr. Lewis A. Sexton, superintendent, Hartford Hospital, discussed Mr. McNamara's and John Kavanaugh, trustee of the Norwalk Hospital and well known for his many philanthropies, discussed Mr. Foley's paper. Mr. Kavanaugh ably told of the philanthropic work that was going on in Norwalk and brought out many new and interesting points.

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THE X-RAY CITY

News of the Month

Hahnemann Hospital, Philadelphia, Receives \$110,000 in Bequests

Two bequests totaling more than \$110,000 and the residue of an estate valued at \$500,000 are left to Hahnemann Medical College and Hospital, Philadelphia, by Fanny Augusta Shortridge who died recently, according to an announcement from the hospital.

One bequest of \$100,000 is an endowment to be known as the John Henry Shortridge Memorial Fund. A gift of \$10,000 was made by Miss Shortridge to establish beds in Hahnemann Hospital in memory of herself and a sister, Lydia Ellen Shortridge.

Miss Shortridge was a member of the Hahnemann Hospital Association, the women's auxiliary organization, for thirty-one years, and had been greatly interested in the development of the institution.

Hospital Dietitian Is Discussed at Chicago Association Meeting

Dr. Bert Caldwell, executive secretary, American Hospital Association, was the principal speaker at the meeting of the Chicago Dietetic Association, May 21. He chose as his subject, "The Hospital Dietitian." Anna E. Boller, president, American Dietetic Association, spoke

on "The American Dietetic Association." Sarah Elkin, Michael Reese Hospital, Chicago, spoke on "Food Clinics."

Talks on "The Status of the Dietitian" in the various types of hospitals were made by Estelle Nesbitt, who spoke for the city hospital, Mae Whitmer, for the county hospital, M. Kelvy, for the state hospital and Mrs. K. M. Thomas, for the acute hospital.

1,000-Bed Hospital Opens in Rome

The Ospedale del Littorio, with a capacity of 1,000 beds, was opened recently in Rome, says the *Journal of the American Medical Association*. The capacity may be increased to 1,500 beds, if necessary.

The hospital has four pavilions, each from three to four stories high. Each pavilion is in itself a complete hospital. For vertical transportation, passenger and freight elevators are in use. For horizontal transportation, a special type of electric automobile is used along the passageways of the grounds.

The hospital has its own plant for the pasteurization of milk. All departments are well organized. The hydrotherapeutic department is particularly well equipped as is also the electrotherapeutic department. It was stated that the cost of the hospital was about \$2,100,000.

Coming Meetings

American Association of Hospital Social Workers.

President, Edith M. Baker, Washington University Dispensary and Allied Hospitals, St. Louis.
Executive secretary, Helen S. Beckley, 18 East Division Street, Chicago.
Next meeting, Boston, June 7-14.

American College of Surgeons.

President, Major General Merritte W. Ireland, Surgeon General, U. S. Army, Washington, D. C.
Director General, Dr. Franklin H. Martin, 40 East Erie Street, Chicago.
Next meeting, Philadelphia, October 13-17.

American Dietetic Association.

President, Anna E. Boller, Riverside, Ill.
Business manager, Dorothy Lenfest, 25 East Washington Street, Chicago.

American Hospital Association.

President, Dr. Christopher G. Parnall, Rochester General Hospital, Rochester, N. Y.
Executive secretary, Dr. Bert W. Caldwell, 18 East Division Street, Chicago.
Next meeting, New Orleans, October 20-24.

American Medical Association.

President, Dr. M. L. Harris, Chicago.
Secretary, Dr. Olin West, Chicago.
Next meeting, Detroit, June 23-28.

American Nurses' Association.

President, S. Lillian Clayton, Philadelphia General Hospital, Philadelphia.
Secretary, Susan C. Francis, Children's Hospital, Philadelphia.
Next meeting, Milwaukee, June 9-14.

American Occupational Therapy Association.

President, T. B. Kidner, 175 Fifth Avenue, New York City.
Secretary-treasurer, Mrs. Eleanor Clarke Slagle, 175 Fifth Avenue, New York City.
Next meeting, New Orleans, October 20-24.

American Physiotherapy Association.

Secretary, Miss C. H. Ballard, St. Francis Hospital, San Francisco.
Next meeting, Detroit, June 23 to 26.

American Protestant Hospital Association.

President, Luther G. Reynolds, Seattle General Hospital, Seattle, Wash.

Executive secretary, Dr. Frank C. English, Hyde Park, Station O., Cincinnati.
Next meeting, New Orleans, October 17-20.

American Society of Clinical Pathologists.

President, Dr. J. H. Black, Dallas, Texas.
Secretary-treasurer, Dr. H. J. Corper, Metropolitan Building, Denver, Colo.
Next meeting, Detroit, June 20-23.

Association of Record Librarians of North America.

President, Mrs. Jessie Harned, Chicago.
Corresponding secretary, Ruth T. Church, Boston City Hospital, Boston.
Next meeting, Philadelphia, October 13-18.

Children's Hospital Association of America.

President, Dr. Howard Childs Carpenter, 1805 Spruce Street, Philadelphia.
Secretary-treasurer, Bena M. Henderson, Milwaukee Children's Hospital, Milwaukee.
Next meeting, New Orleans, October 20-24.

International Catholic Federation of Nurses.

President, Alice M. O'Halloran, 847 Wynnewood Road, Overbrook, Philadelphia.
Executive secretary, Margaret E. Molloy, International Headquarters, Suite 130, 430 South Michigan Avenue, Chicago.
Next meeting, Milwaukee, June 6-8.

National League of Nursing Education.

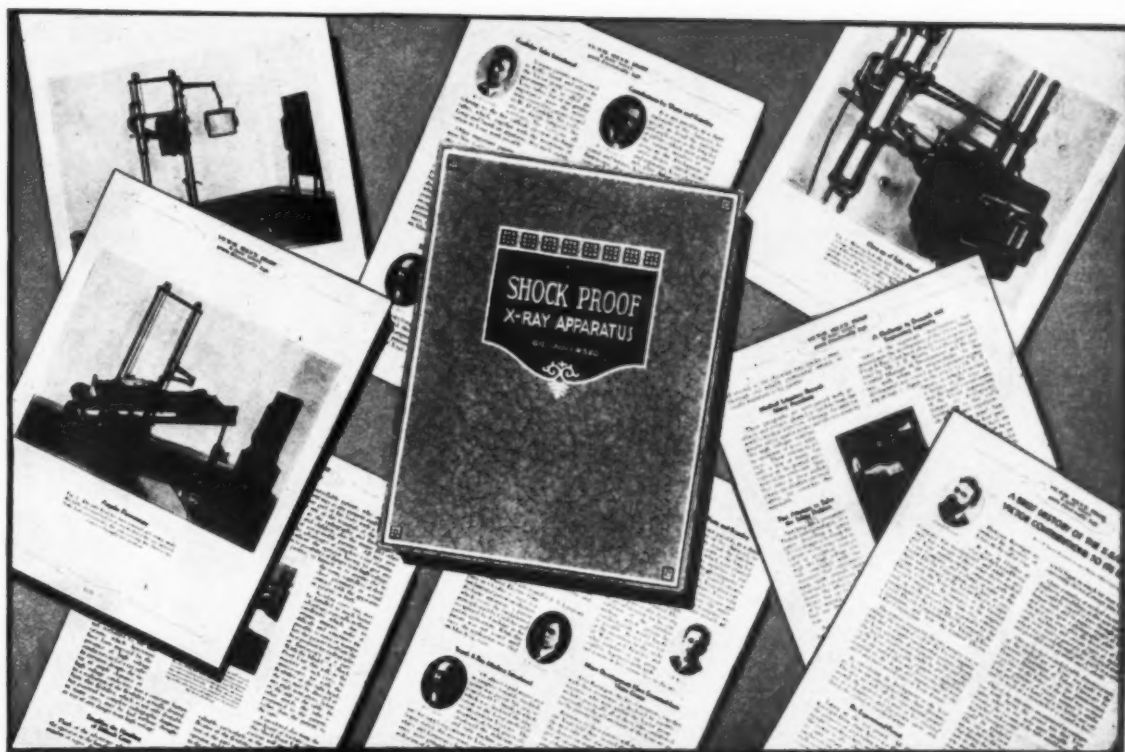
President, Elizabeth C. Burgess, Columbia University, New York City.
Secretary, Nina D. Gage, 370 Seventh Avenue, New York City.
Next meeting, Milwaukee, June 9-14.

National Organization for Public Health Nursing.

President, Anne L. Hansen, 181 Franklin Street, Buffalo, N. Y.
Director, Katherine Tucker, 370 Seventh Avenue, New York City.
Next meeting, Milwaukee, June 9-14.

Ontario Hospital Association.

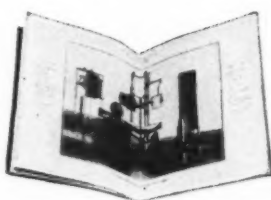
President, R. H. Cameron, 62 Wells Hill, Toronto.
Secretary-treasurer, Dr. F. W. Routley, Medical Arts Bldg., Toronto.
Next meeting, Toronto, October 1-3.



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so much that you should know . . . in the story of this new x-ray unit that this beautifully illustrated brochure should be in your hands.

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News of the Month

Friendliness, Informality Prevail at Minnesota Meeting

ST. PAUL was this year the scene of the annual Minnesota Hospital Association meeting, whose members and guests gathered at the Hotel St. Paul, May 23 and 24, to the number of about 125.

As is usual at the Minnesota hospital meetings, friendliness and informality prevailed, and the various sessions under the chairmanship of President J. J. Drummond, manager, Worrell Hospital, Rochester, Minn., were well attended and greatly enjoyed.

The election of officers for the coming year resulted as follows: president, Paul H. Fesler, superintendent, University of Minnesota Hospital, Minneapolis; first vice-president, the Rev. W. Merzdorf, superintendent, St. Lucas Deaconess Hospital, Faribault; second vice-president, Dr. H. A. Burns, superintendent, Minnesota State Sanatorium, Ah-Gwah-Ching; third vice-president, Catherine Allison, Winona General Hospital, Winona; secretary-treasurer, James McNee, superintendent, St. Luke's Hospital, Duluth; executive committee, Victor Anderson, manager, Abbott Hospital, Minneapolis; J. J. Drummond, manager, Worrell Hospital, Rochester; A. N. Calvin, executive secretary, Midway Hospital, St. Paul.

Banquet Is Enjoyable Affair

The banquet on Friday evening drew a large attendance. President Drummond acted as toastmaster, thus providing rich entertainment for those present. Speaking more or less in conundrums, he kept the members of his audience fascinated as they strove to solve the mystery of his utterances and to follow his flights of fancy into the realms of nature, art and literature. The speaker of the evening was Dr. Lotus D. Coffman, president, University of Minnesota. Doctor Coffman gave an inspirational address that was listened to with close attention and evident appreciation. He was warmly thanked for his presence and for his helpful talk.

At the opening session on Friday morning invocation was given by the Rev. Frederick D. Butler, St. John's Episcopal Church, St. Paul. This was followed by an address of welcome given by L. R. Ferguson, commissioner of education, in the unavoidable absence of the Hon. L. C. Hodgson, mayor of St. Paul. The Rev. Walter Merzdorf, superintendent, St. Lucas Evangelical Deaconess Hospital, Faribault, responded to the address of welcome, following which Dr. Walter E. List, superintendent of Minneapolis General Hospital, presented the report of the nominating committee.

Three excellent papers were presented at the Friday morning session as follows: "General Administration of a Small Hospital," V. I. Sandt, superintendent, Fairview Hospital, La Porte, Ind.; "Methods of Properly Reducing Hospital Supply," John C. Dinsmore, assistant director, University of Chicago Clinics; "Smoothing Off the Rough Edges," Mary A. Foley, director of dietetics, The Kahler Corporation, Rochester.

Miss Foley spoke in general of what the hospital owes

the dietitian, and of what the dietitian in turn owes the hospital. Since cooperation is the keynote to success in eliminating food waste, Miss Foley said, the dietitian must have the cooperation of the hospital administration, the physicians, the nurses and the patients. She then enumerated ways in which this cooperation could be secured. Miss Foley closed with a plea to the administrators present to give their dietitians their loyal support.

After the luncheon the business meeting was held and the reports of the various committees presented. This was followed by the president's address, in which Mr. Drummond dealt with a recent report of the American Medical Association which stated that 35 per cent of the hospital beds of the country were vacant in 1929. "It seems strange," Mr. Drummond said, "that at a time when the hospitals of our country are thus vacant, the government is busy constructing additional hospitals of such size that within ten years those for whom these institutions are being built will be cured or dead, and the structures will remain a burden on the people in the form of taxation."

The only formal paper at the meeting was given by L. C. Austin, superintendent, Mt. Sinai Hospital, Milwaukee, on "Absorption of Small Charges." A round table discussion on "Small Economies in the Hospital" conducted by Dr. R. C. Buerki, superintendent, State of Wisconsin General Hospital, Madison, Wis., followed, and the sessions concluded with the report of tellers and of the resolutions committee.

The only event scheduled for Saturday morning was a demonstration of a staff conference given by the staff of the Midway Hospital, St. Paul.

Much of the success of the convention was due to the efforts of Joseph G. Norby, secretary-treasurer, superintendent, Fairview Hospital, Minneapolis, and to Margaret Rogers, superintendent, St. Luke's Hospital, St. Paul, who as chairmen of the committee on local arrangements also contributed to the success of the convention.

In the course of the meeting various speakers voiced regret at the approaching departure from St. Paul of Dr. Donald C. Smelzer, superintendent, Charles T. Miller Hospital. Doctor Smelzer has been appointed medical director of the Graduate Hospital of the University of Pennsylvania, Philadelphia. He will assume his new responsibilities July 1. His successor at the Charles T. Miller Hospital will be Dr. Peter Ward, assistant director, Albert Merritt Billings Hospital, Chicago.

Catholic Association Sets Time and Place of Next Meeting

The annual convention of the Catholic Hospital Association will be held at the Catholic University of Washington, Washington, D. C., September 1 to 5.

New, mild, gentle bulk and roughage WITHOUT BRAN—a new, attractive form

Especially efficient in cases where vegetables are not liked by patients. Also where bran is too severe.

You may have been seeking something like it for scores of patients.

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THE PSYCHOLOGY OF ATTRACTION

This can be called almost a *new method* in treating constipation because of the way in which *efficiency* is here combined with an *entirely new attraction* in a helpful food.

This vegetable-cellulose comes in a luscious Rice Flakes made by HEINZ of "57" fame. While eating HEINZ Rice Flakes the patient is conscious only of the most alluring flavor and the daintiest of texture ever achieved in a breakfast cereal.

After eating, the vegetable-cellulose increases *four to six times* in bulk due to moisture absorption, the fine, soft fluffy particles begin to stimulate mus-

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That it is practically essential is not too extravagant a claim.

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*Fellow, Mellon Institute of Industrial Research.

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Children *want* this cereal—grown-ups also like it. There is no resistance to a treatment so delightful; so results are practically inevitable in nine cases out of ten.

We do not, of course, advocate HEINZ Rice Flakes as a substitute for vegetables but as a supplementary food where it may be difficult to get sufficient vegetables consumed. Also in those cases where the harshness of bran is too severe for certain intestinal conditions.

FREE SUPPLY FOR TESTS

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resentative will supply *free* packages on request—no charge of any kind whatever. Mail coupon below, without any obligation, if you would like to have him call, or if you want complete information about HEINZ Vegetable-Cellulose in HEINZ Rice Flakes.

The patient should have two servings daily for the first week to start the benefits; one serving daily thereafter is sufficient to maintain them.

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News of the Month

Ohio Program Covers a Wide Range of Hospital Problems

A VARIETY of hospital problems, ranging from human relationships to housekeeping, laundry and maintenance problems, marked the two-day session of the Ohio Hospital Association meeting in Cincinnati, April 29 and 30. An informal luncheon on Tuesday opened the meeting.

More than 150 persons took part in the program, either as speakers or listeners. At the close of the meeting, they chose as next year's officers the following: president-elect, John E. Ransom, Toledo Hospital, Toledo; president, F. W. Hoover, City Hospital, Alliance; first vice-president, Elizabeth Pierce, Children's Hospital, Cincinnati; second vice-president, J. P. Smith, Cuyahoga Falls Sanitarium; treasurer, the Rev. M. F. Griffin, Cleveland; member of the board of directors, Dessa Shaw, Memorial Hospital, Piqua.

The Rev. Philip Vollmer, Jr., Fairview Park Hospital, Cleveland, and this year's president of the association, opened the meeting with a splendid address on "Human Relationships in the Hospital." A great mass of mechanical paraphernalia has not changed our humanity in any essential particular, Mr. Vollmer said. We live highly artificial lives, but our problems remain, at bottom, personal problems.

The responsibility for humanizing the hospital rests with the superintendent, he emphasized. He suggested three ways in which this could be done: frequent conferences with employees; judicious recognition of merit; courses in conduct especially for nurses—the right type of bedside nursing will probably do more to humanize the hospital than any one other thing.

Collections Are Discussed

Following Mr. Vollmer's address, F. W. Hoover was introduced as chairman of a round table discussion on "Reimbursements for the Care of Indigents From Taxation Funds." F. E. Baxter, Lima Hospital, told of the trouble his hospital had with the collection of township and county cases. In a great many instances the township and county trustees will cut the bill from 35 per cent to 75 per cent and then return it marked "paid in full." Often they repudiate it altogether. Louis C. Levy, Jewish Hospital, Cincinnati, announced that there is a law on the statute books of Ohio that will take care of such cases.

John Mannix, Elyria Memorial Hospital, Elyria, executive secretary of the association, told of the way his hospital had solved the problem. A contract is issued to the townships surrounding the city, which promises to render service regularly at a flat rate. All the service their indigents need is given for a sum not to exceed \$1,000. They are billed at the per diem cost of the hospital. Last year, he said, the hospital lost only about \$200 in this way.

J. A. Diekmann, Bethesda Hospital, Cincinnati, then

discussed collections for industrial service. Mr. Diekmann questioned thirty superintendents about their relations with the industrial board. He received twenty-six replies, a summary of which revealed that many superintendents feel that the board is not prompt enough in remitting for the state cases. He said also that hospitals should be informed earlier if cases are disallowed. Otherwise, the financial loss the hospitals have to accept is heavy.

Industrial Board Is Represented

Dr. W. E. Elder of the industrial commission was present and asked for a copy of Mr. Diekmann's paper to present to the commission. He also explained the reasons for many of the delays that occurred in paying the hospitals. The industrial board has at the present time 140 contracts signed and in force. Of this number, four are under \$4; four, \$4 to \$4.50; eight, \$4.50 to \$5; twenty-seven, \$5 to \$5.50; thirty-eight, \$5.50 to \$6; thirty-eight, \$6 to \$7; twelve, \$7 to \$8; four, \$8 to \$9; three, \$9 to \$10; two, over \$10. The dividing line in hospital costs, Doctor Elder observed, is between \$5.50 and \$6.

The Rev. John Benson, White Cross Hospital, Columbus, in defense of the delay for which the commission is often blamed, said that it works under funds provided by the state and has never been able to put on an adequate force of workers. He said that he knew of five hospitals that breached their contracts with the commission by charging the patients extra money. The Rev. A. G. Lohman, Deaconess Hospital, Cincinnati, also contributed to the discussion.

Mary E. Yager, Women's and Children's Hospital, Toledo, led the discussion of "Hours of Special Duty Nurses, and Group Nursing." Those who took part included: A. E. Hardgrove, City Hospital, Akron; H. E. Frazier, People's Hospital, Akron; the Rev. Mr. Lohman; Dr. E. R. Crew, Miami Valley Hospital, Dayton; Mr. Diekmann; Mr. Mannix; Frank E. Chapman, Mt. Sinai Hospital, Cleveland, and the Rev. Mr. Benson.

Housekeeping Problems Are Discussed

The second day was devoted to a discussion of the problems of housekeeping, laundry and maintenance problems. Those who contributed to the discussions included: B. W. Stewart, Youngstown Hospital, Youngstown; Dr. C. S. Woods, St. Luke's Hospital, Cleveland; Mr. Hardgrove; the Rev. Mr. Lohman; Mr. Frazier; Mr. Levy and Mr. Chapman. Father Griffin opened the discussion on methods that have been found practical in avoiding costly errors in the construction of modern hospitals. The discussion was closed by Dr. A. C. Bachmeyer, Cincinnati General Hospital, Cincinnati.

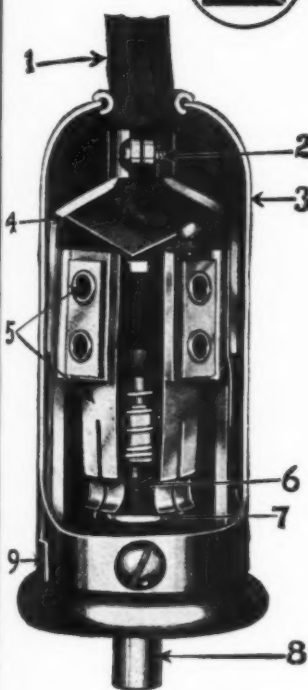
Following a business session and the introduction of the officers who had been elected, the meeting was adjourned.

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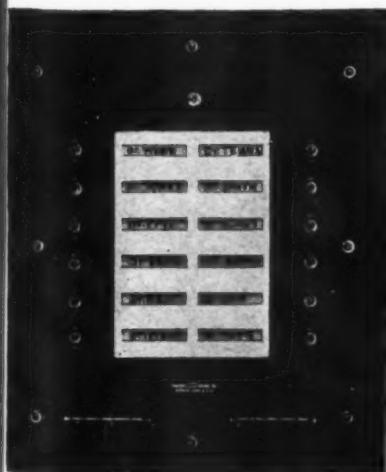
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News of the Month

First Unit in New Hospital Group Is Out-Patient Building

Builders are putting the finishing touches on the new out-patient building of John Sealy Hospital, Galveston, Texas, and it is planned to occupy the building by August 1. This will give the department time to get things in shape by the opening of the Fall term of the medical school in September.

This building is the first unit of the hospital program of the Sealy and Smith Foundation. Last Fall a new power plant and laundry were erected at a cost of \$250,000 to supply power to the new buildings as they were erected. Later on this year work will be started on a new nurses' home. The foundation also is considering remodeling a building to provide adequate accommodations for the interns at the hospital. Plans are also under consideration for a new kitchen and dining room to be added to the present hospital.

The new out-patient department is across the street from the present hospital and is connected with it by an arcade. It is likely that a new hospital will eventually be built and connected directly with the out-patient structure.

The Sealy and Smith Foundation was formed by John Sealy and his sister, Mrs. R. Waverley Smith. Mr. Sealy and Mrs. Smith are the children of John Sealy, Sr., the founder of the John Sealy Hospital.

The will of John Sealy, Sr., provided a legacy toward the establishment of some useful project or charity in Galveston. His widow and his brother felt that a hos-

pital would fulfill Mr. Sealy's wishes and the hospital was built in 1891.

John Sealy, Jr., and Mrs. Smith were greatly interested in this monument to their father and in order that it should continue for time to come they formed the Sealy and Smith Foundation shortly before the death of Mr. Sealy in 1926. The foundation controls the estate of Mr. Sealy.

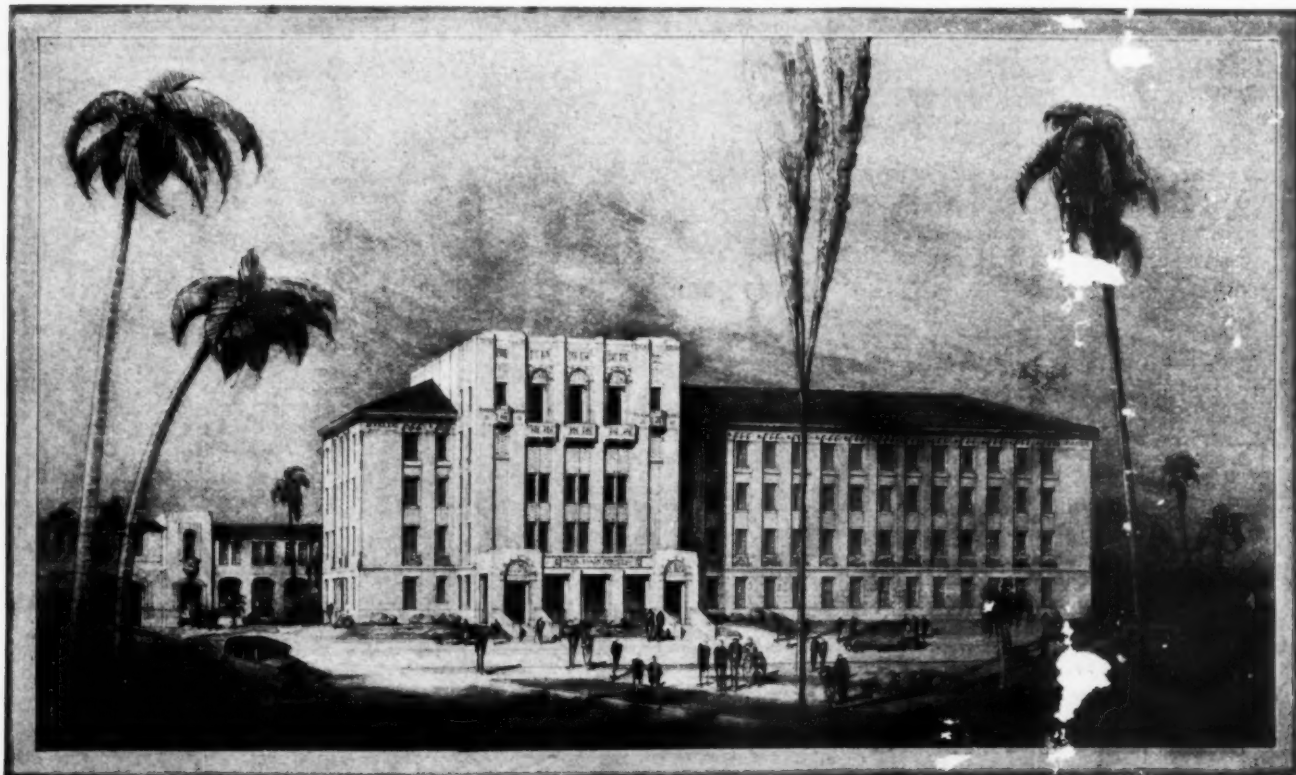
Work to Start Shortly on \$600,000 Waldheim Clinic, St. Louis

Work on the Waldheim Health Clinic, St. Louis, Mo., is to start shortly, according to reports. The clinic will be a seven-story building, adjacent to the Jewish Hospital and facing Forest Park Boulevard.

The clinic will serve as the health center for eleven Jewish institutions organized largely for charitable purposes. Twenty-two clinics will be held in the building, with a capacity for from 400 to 500 patients daily.

The clinic building and the remodeling of three stories of the left wing of the Jewish Hospital, with which it will be connected, will cost approximately \$600,000. The additional space in the main hospital is to be made into rooms for 108 beds for patients of moderate means. With the addition of 108 beds, the hospital will have a bed capacity of 400 patients. The clinic is the gift of Mr. and Mrs. Aaron Waldheim, St. Louis.

E. Muriel Anscombe is superintendent of the Jewish Hospital and president-elect, Midwest Hospital Association.



Architect's drawing of the new out-patient clinic at John Sealy Hospital, Galveston, Texas.

V, No. 6

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It is the job of the Clow Soldier of Sanitation to make sure that each installation, on which he is called in, pro-

vides the very ultimate in sanitation surety—and also to make certain that the installation will function on a very minimum of dollars.

To back him in this important work, Clow goes to extreme lengths in the factory.

For example: every battery of urinals, closets, lavatories and similar fixtures is set up according to specifications before shipment—and tested under conditions bordering on actual service.

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On all jobs where sanitation may develop into an acute problem—the Clow Soldier of Sanitation will gladly give you the fruits of Clow's 52 years of experience. And this man has behind him the most complete line of specialized fixtures in the world. Call him in. This is Bill Spillane, Sales Manager of the Plumbing and Heating Department, Chicago office.

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News of the Month

Nurses to Consider the Patient and His Needs at Biennial Meet

That the nursing profession is making a comprehensive endeavor to bring about a closer relationship between the nurse and her potential patient, the public, is reflected in the program for the biennial convention of the three national nursing organizations, to be held from June 9 to 14 in Milwaukee. In joint session and in individual meetings, nurses are being reminded of their major objective to bring nursing service within the reach of every individual who needs nursing care.

In the joint program, emphasis is being laid on the consciousness of the nursing profession of its responsibility to the community, the problems discussed and details presented being reinterpreted in terms of the patient's needs. "Nursing the Community" will be the topic at the Tuesday morning session, while at the Tuesday and Thursday evening joint sessions, "Medical Cost and Nurse Distribution," presented by a speaker from the Committee on the Cost of Medical Care, and "The Community and Nursing Education" strike a significant keynote.

The same trend of thought is evidenced in the programs of the National League of Nursing Education and the National Organization for Public Health Nursing. This is shown in the title of the president's address, for which S. Lillian Clayton has selected as her subject, "The American Nurses' Association and the Patient."

The program for the five joint sessions stresses nursing legislation, group and hourly nursing, nursing education and the distribution of nursing service, while significant of the importance of the nurses' registry as the distributor of nursing service are the two registry round tables to be held simultaneously Thursday morning, June 12, at eleven o'clock.

Registry Problems to Be Considered

The first of these round tables has been arranged for the discussion of the registrant's problems. The first topic will be "Relationships—Registry, Nursing School and Private Duty Nurse." Parallel registry problems and those of the nurses going into the home will form the second part of the program.

From the point of view of those in charge of official registries, the second registry round table will be the most important event at the Biennial. The resumé of the registry study being conducted at American Nurses' Association headquarters will open the meeting. Consideration of the "Tentative Minimum Standards for Official Registries," which are to be submitted to the board of directors for final approval at the June meeting, will be followed by a discussion of details important in the work of the registry, namely, essential record forms and publicity methods and cost.

The difficult and ever present problem of relief giving will be discussed at all advisory council and A. N. A. business meetings. The principles of relief giving and a presentation of the relief fund situation by Carrie M. Hall, chairman, Relief Fund Committee, will form the opening subject of the A. N. A. meeting on Wednesday morning, June 11. But because the problem of relief

cannot be separated from the problem of savings, the second topic at that meeting will be insurance and savings.

The four A. N. A. sections, the private duty, government, legislative and mental hygiene sections, will hold their two meetings as usual. The American Red Cross holds its meeting for the two groups, home hygiene and care of the sick, and the state and local committees. The state executive secretaries will meet twice, once for a closed luncheon meeting and again Thursday evening, while the office nurses and nurse anesthetists, that newly developed group of nurses whose problems differ from those of other nurse groups, are being afforded an opportunity for discussion on Wednesday morning.

The National League of Nursing Education program includes sessions conducted by the education committee with the topic, "Staff Conferences," and by the instructors' section, with the discussion of "Pre-Tests" as the general topic.

Social events during the convention week are outstanding. Wednesday evening is designated as "state dinner" evening. In addition to smaller group dinners, the Midwest and Southern divisions dinners have been arranged, to be followed by the reception at which Wisconsin nurses will entertain. Among the luncheons planned are those for the state executive secretaries, the state boards of nurse examiners, the North Carolina nurses and the Midwest division.

Midwest Association Names Officers for the Coming Year

Officers of the Midwest Hospital Association for the coming year have been named as follows: president, the Rev. L. M. Riley, superintendent, Wesley Hospital, Wichita, Kan.; president-elect, E. Muriel Anscombe, superintendent, Jewish Hospital, St. Louis; first vice-president, J. H. Rucks, superintendent, Wesley Hospital, Oklahoma City, Okla.; second vice-president, Dr. G. W. Jones, Lawrence, Kan.; executive secretary and treasurer, Walter J. Grolton, superintendent, Missouri-Pacific Hospital, St. Louis.

New trustees chosen are: Dr. F. R. Heath, superintendent, Bethany Hospital, Kansas City, Kan., J. R. Smiley, superintendent, St. Luke's Hospital, Kansas City, Mo., and Dr. Wann Langston, superintendent, University Hospital, Oklahoma City, Okla.

London Hospital Installs Oxygen Chamber

An oxygen chamber for patients who require an unusual amount of oxygen has been lately installed in Guy's Hospital, London.

It is so arranged and lighted that the patient who occupies it does not feel separated from the rest of the patients although the door to the chamber is securely sealed to keep the oxygen from escaping. The attending physician may speak to the patient inside by means of a speaking tube.

"Can't I have something instead of milk, doctor?"

FOR THE fretful convalescent who has tired of plain milk . . . for the many patients who actually dislike it . . .

Cocomalt not only transforms milk into a delicious, tempting drink—but actually *increases its food value more than 70%.*

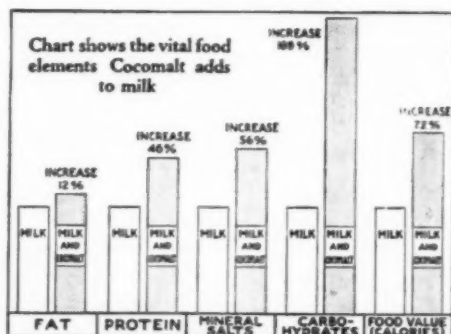
A scientific food-concentrate, Cocomalt comes in convenient powder form ready to be mixed with milk—hot or cold. The result of the mixture is a rich, smooth, creamy chocolate flavor food drink which is high in nutritive value—and palatable even to the fussiest invalid.

Easily assimilated

Cocomalt is a balanced combination of milk protein, milk minerals, cocoa, sugar, malt and eggs. Made as directed, it increases the caloric value of a glass of milk 72%—adding 46% more protein, 56% more mineral salts, 188% more carbohydrates, *but only 12% more fat.* Cocomalt strengthens and nourishes without burdening the digestion.

Laboratory tests show that Cocomalt contains Vitamin A, Vitamin B complex, and Vitamin D. The latter is present in sufficient quantity to make a definite contribution to the anti-rachitic potency of the diet; thus Cocomalt is especially valuable for growing children.

Available in three sizes: half pound, 30c—one pound, 50c—and the economical five pound family size. At grocery and leading drug stores.



Free to Physicians

Cocomalt is made under modern, sanitary conditions—packed in air-tight containers. We would like to send you a full-size can for testing. Coupon brings it to you—free.

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DELICIOUS HOT OR COLD



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Dept. 166, Hoboken, N. J.

Please send me, without charge, a half pound can of Cocomalt.

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ADDS 72% MORE NOURISHMENT TO MILK

News of the Month

St. Luke's Medical Center Is Started in Tokyo

The cornerstone of the first unit of the new St. Luke's International Medical Center, Tokyo, Japan, has been laid on the site of the old St. Luke's Hospital which was destroyed at the time of the earthquake and fire in 1923.

The hospital will, when all its units are completed, have facilities for 500 patients. The capacity of the outpatient department will be from 700 to 1,000 patients a day. The hospital will contain headquarters for school clinics. The east wing will house the college of nursing.

Contributors to the enterprise include the Rockefeller Foundation, the Emperor of Japan and John D. Rockefeller, Jr.

The center will have a staff of 150 Japanese nurses, five American nurses who will be on the teaching staff, forty-six Japanese physicians and three American physicians. Dr. Rudolf Bolling Teusler, founder of the original hospital in 1902, will continue as head of the institution.

Sailors, Soldiers and Marines to Benefit

By the will of Mary W. Springer, Boston, who died recently, the residue of her estate goes to the Massachusetts General Hospital, Boston, for the benefit of United States soldiers, sailors and marines.

The will specifies that the soldiers, sailors and marines shall be provided not only with surgical and medical treatment but also with artificial limbs, teeth, glasses, crutches, trusses and any other appliances the hospital may be able to furnish them.

The *Boston Globe* states that the families of the soldiers, sailors and marines shall benefit by the trust fund, and that the trustees may give out small sums to beneficiaries as they may need them.

Other public bequests made by the will were: \$5,000 to the Massachusetts General Hospital; \$500 each to the Peter Bent Brigham Hospital and the Industrial School for Crippled and Deformed Children, Boston.

After payment of public bequests, the will directs that the residue of the estate shall be turned into cash and turned over to the Massachusetts General Hospital in trust.

Faulkner Hospital, Boston, Dedicates New Surgical Wing

Dedication exercises for the new surgical wing of the Faulkner Hospital, Jamaica Plain, Boston, took place on April 24, with Governor Frank G. Allen of Massachusetts and Dr. Robert B. Greenough, president, Massachusetts Medical Society, as guests and speakers. Many prominent men and women who contributed to the \$750,000 fund required to build the wing were present.

Governor Allen commented particularly upon the moderate prices to be charged in the new unit. "In your hospital," Governor Allen said, "single rooms and two and four-bed wards offer accommodations at from \$3 to \$5.50 a day. When we compare this with the rates of

our modern hotels and consider the heavier demand upon the hospital, we are better able to realize what a contribution you are making at the Faulkner Hospital towards this problem."

Doctor Greenough said that with the opening of the new surgical building the hospital stands ready to take on all of its responsibilities in the care of the sick and injured of the community and to give medical and surgical service as efficient as can be obtained in any hospital in the state.

Pennsylvania Completes Hospital for Crippled Children

In the new State Hospital for Crippled Children, Elizabethtown, Pa., which has recently been opened, only those children will be admitted whose condition has a prospect of improvement and rehabilitation, says the *Pennsylvania Medical Journal*.

The hospital, of which only the first unit has been completed, stands on a 300-acre tract on the outskirts of Elizabethtown. The building of subsequent units will provide for an ultimate capacity of 700 or more patients. The present unit has a capacity of 100. Not only are surgical care and treatment being provided for the crippled children, but there are being given also occupational therapy and physical therapy courses.

New Nurses' Home Is Projected for Wichita, Kan., Hospital

When the nurses' home of Wesley Hospital, Wichita, Kan., is completed it will provide for training and living quarters for 169 nurses. When the new home is completed, the present nurses' home will be remodeled for pupil nurses who are beginning their probationary period. It will take care of about forty girls.

The new home, for which the plans have been drawn, will be three stories high and will follow the same general line of architecture as the hospital.

On the third floor, in addition to accommodations for forty-eight nurses, there will be a dormitory for sixteen night nurses. The dormitory is so separated from the other rooms that the nurses will not be disturbed.

There will be two covered porches on the north and west side of the building, and an open porch over the recreation room on the ground floor.

Cincinnati to Get New Hospital

Thirty-five physicians of Cincinnati have decided to build a hospital to provide facilities for the western part of the city, says a news release. The new hospital will take in the present site of the Price Hill Hospital, with a development plan calling for an expenditure of \$100,000. The new building will be five stories high and capable of housing from seventy-five to a hundred beds. It will be known as the Western Hills Hospital.

ST. MARK'S
HOSPITAL
Nurses' Home
New York
Crow, Lewis & Wick
New York, Architects

Construction Work for HOSPITALS

A message to architects,
trustees and officials



OUR general construction activities include institutional work of almost every character—hospitals, clinic buildings, nurses' homes, dormitories, recitation halls, penitentiaries, power plants—all built in close cooperation with the architect.

Under our form of contract the work is done quickly and at low cost, workmanship of high quality is assured and the interests of trustees and officials are safeguarded.

Among the institutions and governments which we have served as builders or consulting engineers have been the following:

Abington Memorial Hospital,
Abington, Pa.
Alfred University, Alfred, New York
Brazilian Government, Nurses' School,
Rio de Janeiro
Chestnut Hill Hospital,
Chestnut Hill, Pa.
Children's Hospital, Philadelphia
Colgate-Rochester Divinity School,
Rochester, N. Y.
Cornell University, Ithaca, N. Y.
Drexel Institute, Philadelphia
Eastern State Penitentiary,
Graterford, Pa.

First Presbyterian Church,
Pottsville, Pa.
Girard College, Philadelphia, Pa.
Princeton University, Princeton, N. J.
Protestant Episcopal Hospital,
Philadelphia
St. Mark's Hospital, New York
Trinity Church, Newport, R. I.
United States Government, Embassy,
Rio de Janeiro
United States Government, Consulate,
Seville, Spain
University of Pennsylvania, Philadelphia
Yale University, New Haven, Conn.

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MAXIMUM RETURN TO CLIENTS PER DOLLAR INVESTED

Personals

DR. JOHN E. DAUGHERTY has resigned as executive director of the Jewish Hospital, Brooklyn, N. Y. He will be succeeded by SAMUEL G. ASCHER.

DR. CHARLES LIEBER, Waukegan, Ill., is the new superintendent of the Lake County General Hospital. DOCTOR LIEBER succeeds DR. KARL M. BECK, who resigned to make a tour of Europe.

DR. ALBERT R. CARTER, staff member of St. Andrew's Hospital, Murphysboro, Ill., for twenty-three years, died suddenly, April 7.

C. SCHAFER, who has had considerable experience as superintendent of naval hospitals, has been chosen to succeed AGNES SHORE as superintendent of Montgomery Hospital, Norristown, Pa.

CHARLES E. FINDLAY, superintendent, Starling-Loving Hospital, Columbus, Ohio, has been appointed superintendent of Springfield City Hospital, Springfield, Ohio.

MRS. C. W. WEBB, who has been head of the social service department of Lakeside Hospital, Cleveland, for the last ten years, has been appointed director of social service, the University Hospitals of Cleveland.

DOROTHY B. THURSTON, R.N., is the new superintendent of Halifax District Hospital, Daytona Beach, Fla.

LETHA HUBBARD has been chosen superintendent of St. Michael's Clinic, Anniston, Ala.

DR. BENJAMIN B. KASSON, for eleven years assistant superintendent of the Worcester City Hospital, Worcester, Mass., has resigned.

ANNA D. FOOTE has resigned as superintendent of the Good Samaritan Hospital, Galion, Ohio. She is succeeded by KATHERINE TOPPER.

ELEANOR A. SONNICHSEN, R.N., is the new superintendent of Sellwood General Hospital, Portland, Ore.

C. CLAFLIN DAVIS, who resigned as superintendent of St. Luke's Hospital, Bethlehem, Pa., on February 1, became general manager of the American Hospital of Paris on March 1.

F. P. G. LATTNER, an attorney of Dubuque, Iowa, has been named superintendent of Finley Hospital of that city to succeed HAROLD A. GRIMM who is now with Millard Fillmore Hospital, Buffalo, N. Y.

NELLE HULSON is the new superintendent of Oak Knoll Sanatorium, Mackinaw, Ill. MISS HULSON was formerly superintendent of nurses, Peoria Municipal Tuberculosis Sanatorium, Peoria, Ill.

DOROTHY I. LENFEST is the new business manager of the American Dietetic Association, succeeding HELEN A. WOODING who has resigned because of illness. MISS WOODING had held the office only a short time, she having taken the place left vacant by the resignation of DOROTHY B. RICHMOND.

HAZEL H. SMITH, director of social service, West Jersey Homeopathic Hospital, Camden, N. J., has resigned to take up similar work near her new home in Coatesville, Pa.

E. SCOTT MARTIN is the newly elected president of the Southside Community Hospital board, Farmville, Va. He succeeds DR. J. L. JARMAN, who recently resigned. MR. MARTIN was elected for a term of two years.

CAROLINE E. SCHAUTZ, superintendent, Jamestown General Hospital, Jamestown, N. Y., has resigned her position because of ill health.

DR. WALTER A. HODGES has resigned as medical director and superintendent, Elm Grove Sanitarium, Bushnell, Ill., to accept a similar position at the La Vina Sanatorium, La Vina, Calif.

SARAH P. LAWRENCE, formerly superintendent of the New York Infirmary for Women and Children, recently became an assistant in the division of rural hospitals, Commonwealth Fund.

HELEN BADER, R.N., has been appointed superintendent of nurses, University Hospital, Enid, Okla. The position was recently left vacant by the resignation of ANNA M. LINDELL, R.N.

New Cleveland Institution Has Two Plans for Reducing Prices

Plans are completed for the new Huron Road Hospital that is to be built in East Cleveland, Ohio, at a cost of \$1,070,000. The hospital, which is to have space for 200 beds, is expected to take two years to build.

The hospital is to provide for those patients who can pay only moderate fees, as well as for those who prefer more luxurious surroundings. A large portion of the floor space will be allotted to two-room suites with an intervening service room. Through this plan one nurse will be able to care for two patients—a patient in each private room—and the cost to the patient for nursing will be reduced.

To provide against the possibility of disaster through x-ray equipment, especially designed vaults will be built.

New Hospital for Chicago Will Have Apartments for Convalescents

The new \$5,000,000 Wesley Memorial Hospital, Chicago, to be completed in time for the World's Fair in Chicago, in 1933, will have accommodations ranging in price from nothing for charity patients to \$100 a day for those who desire a complete apartment, including three rooms, a kitchenette and bath, during convalescence, the announcements report. It is hoped that the hospital will be ready for occupancy in the Fall of 1932.

The structure will be thirty stories high and will adjoin the Northwestern University Medical School. The site has already been acquired.

With its diverse clinics, the new institution and the existing facilities which the university has in Passavant Hospital will form a unit capable of caring for almost 1,000 patients at once. The new hospital will be devoted to patients from salaried and wage earning families. More than two-thirds of the patients will be cared for at less than average cost, and many will be cared for free of any charge.

George W. Dixon, Chicago, president of the board of trustees, made the announcements concerning the new hospital. E. S. Gilmore is superintendent.

An intimate detail in her beauty toilet

which every woman expects you to provide

The favorite beauty
soap of more women
than any other kind.

TOILET soap is an intimate thing to a woman—and unless you provide a soap which is familiar to your patients, and meets their complexion requirements, it is apt to cause a dislike for your service from the start.

Why take chances with any other toilet soap but the kind you *know* pleases women—the favorite beauty soap of more women than any other—Palmolive! More than 19,000 leading beauty shops today are telling women to use only Palmolive on the skin.

*Made of pure palm
and olive oils*

Palmolive is a scientifically saponified blend of three vegetable oils: palm oil, olive oil and coconut oil. It contains no fatty acids and no free alkali. These three oils and no other fats whatsoever are used in its manufacture.

Palmolive in your hospital means to every woman that you are considerate of her little home comforts and her beauty needs. Men, too, appreciate Palmolive because it is the soap they are used to at home.



Palmolive is a beauty necessity. Your women patients naturally expect to find it in your hospital.

In more than 19,000 leading beauty shops in America, women are told to use Palmolive, and only Palmolive, to safeguard a lovely skin.

In spite of its quality and prestige, Palmolive costs no more than ordinary soaps.

Write for samples and prices of our four special hospital sizes.

FREE! We will gladly send you samples of each special hospital size upon receipt of your letter.

**Palmolive
in 4 special sizes
for hospitals**

Miniature Palmolive... ½ oz.
Petit Palmolive 1 oz.
Special Guest Palmolive 1½ oz.
Special Club Size 2 oz.

Your hospital's name on the wrappers with order of 1,000 cakes or more.



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NEW YORK KANSAS CITY MILWAUKEE SAN FRANCISCO JEFFERSONVILLE, IND.

News of the Month

Nine-Story Private Patients' Pavilion Opened at Toronto General

"Suggesting the largest and most glittering jewel in a royal crown of buildings, the immense new private patients' pavilion of the Toronto General Hospital was formally opened in April," says *Canadian Health*.

The pavilion has been built at a cost of \$2,000,000 and is the keystone unit of an extension and improvement program at the hospital that will involve the spending of more than \$4,500,000. The new, nine-story wing will further solidify the position of the Toronto General Hospital as being the largest single hospital-medical-educational establishment on the North America continent, says the article. It is the first and oldest hospital in Toronto, having been founded more than a century and a quarter ago.

Now that the new pavilion is in use, the old one will be converted into a nurses' residence.

Jefferson Hospital Starts Work on New Clinic

Enlarged facilities for giving medical treatment to ambulatory patients will be available to physicians, medical students, medical social workers and other hospital personnel in the new Curtis Clinic to be built shortly by the Jefferson Hospital, Philadelphia.

The eight-story building, which will be continuous with the new and enlarged building of the Jefferson Medical College, will cost \$1,000,000, of which \$500,000 has been contributed by Cyrus H. K. Curtis and the balance by members of the board of trustees and their friends.

Date of Next Year's Iowa Meeting Is Announced

The date of the next annual meeting of the Iowa Hospital Association has been set for some time in March, 1931. The place chosen is Cedar Rapids. The announcement is made by Robert E. Neff, administrator, University Hospital, Iowa City, president of the association.

Columbia Issues Catalogue of Nutting Collection

To mark fittingly the thirtieth anniversary of the department of nursing education, Teachers College, Columbia University, the department, under the leadership of Isabel M. Stewart, has issued a booklet on the Adelaide Nutting Historical Nursing Collection. The booklet contains a classified list of books, pamphlets and other material dealing with the history of nursing in America and other countries.

Miss Nutting during the time she was principal of the nursing school, Johns Hopkins Hospital, Baltimore, and after she became a professor in Columbia University, built up a valuable historical collection. She centered

her main attention in the beginning on bringing together all the available writings of Florence Nightingale, and every book or article she could find about the founder of modern nursing. This offered the nucleus for a valuable historical collection which has grown with the years.

The report catalogues completely the collection. In presenting the report Miss Stewart invites the cooperation of all those who are interested in the history of nursing and who would like to have a part in making the collection outstanding in every way.

Clinical Pathologists Prepare for Three-Day Session

The American Society of Clinical Pathologists will hold its ninth annual convention in Detroit, June 20, 21 and 23.

The morning session of the first day will consist of a scientific program. A symposium on "Agranulocytosis" will be held in the afternoon and a round table meeting in the evening. The entire second day's session will be devoted to scientific papers and discussions. The annual banquet will be held in the evening, at which the presentation of medals will be made by Dr. J. H. Black, Dallas, Texas, president of the association. A business session on the morning of June 23 will close the convention.

A Training Course for Laboratory Technicians

An eight months' course in laboratory technique is offered by the school of public health, University of Louisville, and the state board of health, under the direction of the dean, Dr. A. T. McCormack, state health officer, Louisville, Ky.

The next term begins September 15, 1930.

This course prepares men and women to act as technicians in laboratories of all kinds. The essentials for the preparation of the course were carefully studied, and the course developed to fit the needs of both private and institutional work—state boards of health, municipal laboratories, clinics and physicians' offices.

The tuition for the course is \$300, books and stationery approximately \$10 and living expenses \$45 a month.

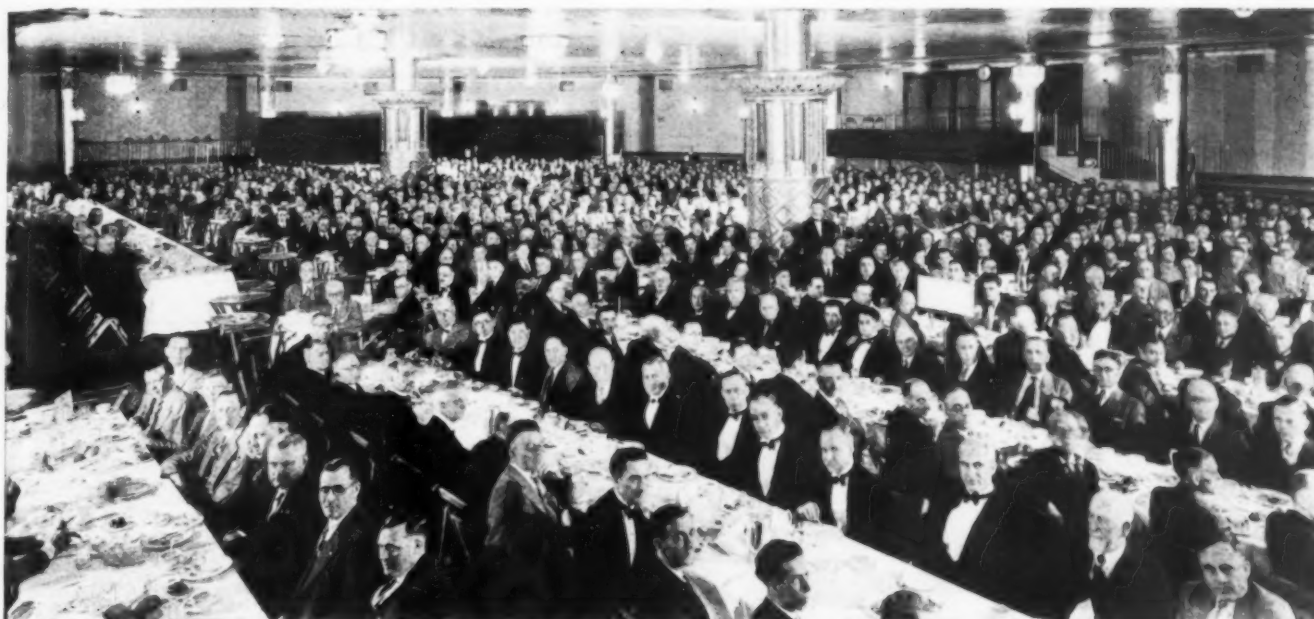
The class is limited in number.

Those interested should write to Dr. L. H. South, School of Public Health Laboratory Technique, 532 West Main St., Louisville, Ky.

New York Hospital Opens Nursing School for Men

St. Vincent's Hospital, New York City, opened a school of nursing for men on February 5, 1930, the *American Journal of Nursing* states.

Frederick Jones, who has been in charge of the Mills School for Men at Bellevue Hospital, is director of the new school, which has its own building near the hospital in a remodeled residence of downtown New York.



A typical Ward, Wells & Dreshman campaign organization—1050 leading, influential citizens in enthusiastic, volunteer service for 10 days.

They Produce Money and Good Will

Such an organization can be built for your hospital campaign in a few weeks, at surprisingly low cost.

Any reasonable fund you may need for a new building, remodeling, or debt elimination can be raised by a similar group of your leading citizens, organized to meet your requirements.

They will iron out ill-will and misunderstandings.

They will develop that intangible but priceless asset, continued good will.

They will build a greater appreciation of the service you are rendering.

They will establish your hospital in a new position of strength in your community.

For wherever and whenever there is a real need of hospital service, there is a constituency ready and willing, if skillfully organized and directed, to meet that need.

A Ward, Wells & Dreshman campaign is planned with as much care for the future as for immediate success.

Let us discuss with you the service that we have rendered other hospitals, and what we can do for yours.

FINANCING SOCIAL PROGRESS—a bulletin of information concerning recent campaigns during so-called "hard times"—is yours for the asking.

WARD, WELLS & DRESHMAN

Philanthropic Organization and Finance

475 FIFTH AVENUE

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NEW YORK CITY

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by ANNA E. BOLLER, Central Free Dispensary at Rush Medical College, Chicago

New Devices That Will Be Welcomed in the Dietary Department

By LULU G. GRAVES

Consultant, New York City

MANY new devices designed to help in the preparation and serving of food are constantly appearing on the market. At the moment manufacturers of equipment seem to be giving particular attention to the dietary departments of institutions. It is a trend in the right direction.

Dietitians and others in charge of the culinary depart-

ments of hospitals are always on the alert for mechanical means of improving their service. Following are a few devices of recent production that may help to solve some problems.

For cooking, there is being manufactured a combination steamer and roaster. This is a double compartment cooker which will also do roasting. If desired, both processes



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A M

Attractive • Practical • Economical



Hospital Silverware

by GORHAM

THE equipment which Gorham manufactures for hospital trays is temptingly attractive to the patient, practical for the hospital to use and store, economical in upkeep, and withstands years of hard wear.

On the above tray: In the center front is a COMBINATION BOWL which has many different uses: With the 3-prong insert (as illustrated) to hold orange-juice glass; without the insert, to serve fruit; with its special cover, to serve cereals or soups; with its collar, to hold

china or glass liner, to serve bouillon, sea foods or fruit cocktail, eggs, ices, etc.

Directly behind the COMBINATION BOWL is the Gorham special easily-filled HOT WATER PLATE. Made in two sizes—8-inch and 9 $\frac{3}{4}$ -inch with special covers for both sizes.

The COFFEE POT illustrated saves hospitals storage space, as the sunken cover feature permits stacking. The accompanying CREAM PITCHER takes a standard paper cream cap.

The sanitary SUGAR SHAKER and ICE CREAM STAND and the remaining articles—SALT AND PEPPER SHAKERS, BREAD AND BUTTER PLATES (5 $\frac{1}{2}$ -inch diameter), NAPKIN RING, and the FLATWARE are typical of Gorham quality.

All Gorham hospital ware is constructed of nickel silver and heavily silver plated. All parts are applied together with hard or silver solder. No soft metal or soft solder is used in the construction of Gorham hospital silverware.

THE GORHAM COMPANY

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New York, 2 West 47th Street

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AMERICA'S LEADING SILVERSMITHS FOR OVER NINETY YEARS



may be carried on at the same time in separate compartments. For the small institution this is particularly valuable. For a larger service requiring the use of both compartments, the steaming and roasting may be done alternately. The water can be easily changed after each meal, as is done in some one-compartment cookers. The interior of the cooking compartments are made of a special composition metal that is easy to clean. These are advantages from a sanitary standpoint. The cooker may be operated with gas, electricity or steam.

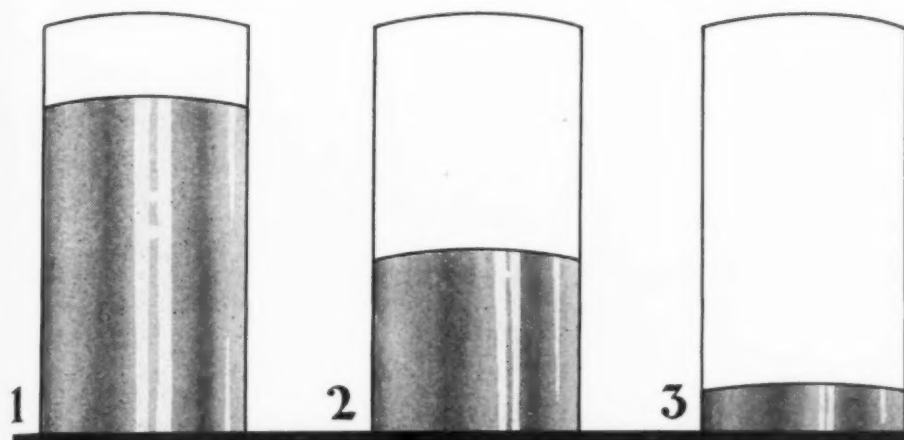
Fried food in a hospital is usually limited to the dining rooms for the personnel. All too frequently it has been fried in such a manner that this limitation should become elimination. With the new apparatus that is now available for deep fat frying, this may be corrected. Fish fritters, croquettes and numerous other foods may be crisp and the right shade of brown without becoming grease soaked. Different types of food may be cooked in the same fat without any bad effects, either in taste or in odor. Provision is made for disposing of crumbs and particles of food. The fat can be used repeatedly. Different types of fryers are on the market, some for use with electricity and some for gas. These can be had either in a monel or a black finish. They have become popular in the hotel field and should be equally helpful in the hospital field in feeding the personnel as well as those patients on a regular house diet.

For the private patient's tray, there is now available an artistic and practical silver bowl. This silver bowl may be used for a number of things. The bowl itself may be used for the same purposes that any bowl is used for—

soup, cereal and other soft or liquid foods. A silver collar with an opening in the center fits into the top of the bowl as is shown in the accompanying illustration. A glass dessert dish fits into the opening of the collar. Filling the bowl with chopped ice will keep the contents of the dish cold for as long a period of time as is necessary for the meal service. Oyster or fruit cocktails, frozen desserts, gelatin desserts and similar foods which must be cold to be appetizing reach the patient in the original condition. When cold drinks are demanded a glass of orange or other fruit juice, milk or eggnog may be placed in the opening of the collar. The bowl filled with ice makes possible cold liquids that are undiluted by ice. The bowl of chopped ice without the collar is an excellent means of serving a half grapefruit or orange.

Another device from a manufacturer of silver is a new steak knife that has a shorter blade and a longer handle than an ordinary knife. Because meat may be cut much more easily with this knife, it is especially helpful to one who must eat from a tray. Another advantage is that it does not slide off the plate or tray as readily as the ordinary knife.

Paper napkins and tray covers in a variety of dainty colors with embroidery effects give the tray a festive air. On holidays and other special occasions they will help materially in developing a color scheme. They may be used as an appeal to the patient who must be coaxed to eat. As a bright spot in the life of the isolated patient they are decidedly worth while. At the same time they do away with the necessity of laundering and sterilizing napkins and tray covers.



A given quantity of "Phillips Milk of Magnesia" (3) neutralizes about three times as much acid as a saturated solution of sodium bicarbonate (2), and nearly fifty times as much as lime water (1).

An Efficient Antacid—Yet Mild and Agreeable

"**P**HILLIPS Milk of Magnesia" finds an important place in hospital use. High in standard of efficacy for fifty-five years, it is a reliable and dependable antacid. It assures an unvarying uniformity of quality so necessary in the best of hospital care.

As a rule hyperacidity of gastric contents is not so much an indication of overproduction of acid as of failure of neutralization.

"Phillips Milk of Magnesia" promptly counteracts hyperacidity, acidity of the mouth and other obvious manifestations of acidosis. When the natural factors of neutralization (food, saliva, secretion

of the pyloric end of the stomach and regurgitation of duodenal contents through the pylorus) fail to neutralize the gastric content, there is a need for "Phillips Milk of Magnesia."

Its antacid action is pronounced. It is agreeable to the taste and inviting in appearance. Further, it has the additional merit of being a laxative—a quality of importance since constipation is so frequently the underlying cause of hyperacidity.

Hospitals at all times are assured a uniformity of quality and efficacy by avoiding imitations. "Phillips Milk of Magnesia" bears our registered trade mark. Insist upon it by name. Obtainable in 4-ounce (25c bottles), 12-ounce (50c bottles), and 3-pint hospital size from druggists and supply houses everywhere.

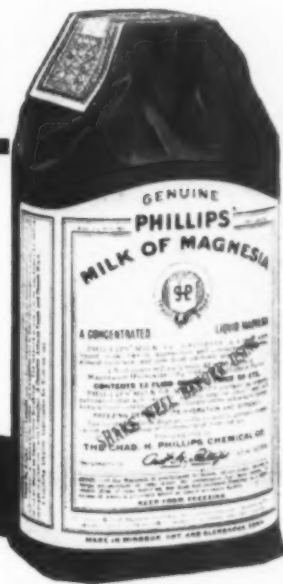
PHILLIPS

Milk of Magnesia

"Milk of Magnesia" has been the U. S. Registered Trade Mark of The Charles H. Phillips Chemical Co. and its predecessor Charles H. Phillips since 1875.

THE CHAS. H. PHILLIPS CHEMICAL COMPANY

NEW YORK



Another type of paper napkin designed to appeal to children or to patients on a low carbohydrate diet is one that shows the fruits and vegetables with which they are chiefly concerned. Groups of vegetables and fruits in the 5 per cent and 10 per cent class are depicted in green and white in the corner of the napkins. Names and pictures are plainly printed making them both interesting and attractive. Food models and posters of these same foods are also available.

In hospitals where the computed diets are prepared for the day in the diet kitchen and sent out to the ward

pantries in individual portions, vegetable parchment will be found most helpful. Like waxed paper it is airproof. In addition to this, it is stronger wet than dry. Moist foods, such as salads and cooked vegetables, may be wrapped in it with safety. Strongly flavored foods thus wrapped will not contaminate other foods in the container, nor will they taint the atmosphere of the ice box. Even in diet kitchens where the special diet trays are prepared for each meal, this vegetable parchment will permit the weighing of all portions, such as butter, cheese and similar foods for the entire day.

The Child Diabetic: His Needs and How They May Be Cared for

By FRANCES B. FLOORE

Formerly Dietitian, University of Michigan Hospital, Ann Arbor

MUCH has been written of the diabetic adult but little has been said about the diabetic child. He is usually a hospital case during the time his diet and the insulin treatments are being adjusted. He then goes home to resume the life of the normal child with one exception—his diet must be weighed and in the majority of cases he must receive insulin treatments.

Many persons look on the diabetic child as a sick child. They feel that he must lead a sedentary life and that he must do only part-time work in school. His normal restlessness and activity are curbed, often mentally as well as physically, and he often receives, in addition, an inadequate diet. Sometimes the diet is deficient in only one factor—calories. He who prescribes the diet feels that if the child can get along without having to take insulin it is wise. The diet, therefore, is sacrificed. Small wonder, then, that the child, with his healthy, normal appetite, craves more food than his meager diet allows him and that he resorts to taking food. How many of us would not do likewise?

Explain Diet Plan to Child

It has been my experience that if the diabetic child thoroughly understands his condition and is given a satisfactory diet with sufficient bulk he will "stick to his diet." If he is given an insufficient diet and is continually hungry, we are asking too much of him when we expect him to eat only what is served on his tray. There are some children who have taken food although they have had a sufficient diet, but these are children who fail to understand the importance of the diet and who fail because they have not been given the necessary information. All children love games, and one of the most interesting games in the world is the game that can be played by the diabetic child. He can make a game of weighing the food, of testing for sugar, and of sticking to the diet and watching the tolerance for sugar go up. Learning the "why" of all the routine tests is also fun. The child feels his importance and responsibility and he is also learning how to care for his own needs. A little encouragement and he will go far; but he will also go equally far in the wrong direction if he is not handled understandingly.

Most diets, however, do include sufficient calories. If these calories exceed the child's tolerance, he is given

insulin to cover the deficiency in his body and to take care of the extra amount of food. But calories are not the only dietary consideration, since the diabetic child needs minerals to help build his rapidly growing body. Milk contains these important minerals in larger amounts than any other food and it is essential that the diet include three glasses daily to fulfill the calcium needs. The rest of the diet may then be built around this, with sufficient vegetables and fruits to supply bulk to satisfy the appetite.

The accusation is often made to the diabetic child and to others that he has been stealing food. It is probable in some instances that this may be the case, the child, half starved for certain essential food elements, having overstepped his diet. But should we brand him as a thief? Especially when it is equally probable that he has not taken food, but has shown sugar for other reasons? He may be coming down with a cold, one of the first symptoms of a cold with the diabetic child being the appearance of sugar in the urine. Other reasons for his showing sugar may include an improper dosage of insulin, mistakes in weighing the food, a lack of sufficient exercise, worry, or insulin leaking from the syringe during the injection. With all of these reasons to any of which may be attributed the appearance of sugar, why choose one of them and condemn and punish the child for something he may not have done? Even if he is guilty of purloining food, is it not a warning signal that there is something wrong with the treatment he is receiving.

Has he been sufficiently instructed so that he knows the deleterious effects of overstepping his diet, and has he been encouraged to the point where he will make every possible effort to "stick to the diet"? Of all the conditions known to medicine none needs the confidence and understanding that the diabetic patient needs. If this can be developed in childhood it will make it much easier for him as he grows older. Teach your diabetic, win him over and then cooperate to help him to lead the normal life of the normal person.

Most diabetic children are unusually eager and anxious to learn and they are well equipped with the mental facilities for learning. The fact that they have diabetes is not in itself a mental handicap but they often spend so much of their time in the hospital that it is impossible for them to keep up with their class work.

HOW MODERN HOSPITALS CUT EXPENSE AND IMPROVE FOOD SERVICE

A more modern method called Thermotainer
now largely eliminates handling of food trays

THIS new method has proved a boon to many leading hospitals. A boon—in not only cutting costs but also in actually improving food service. One kitchen now serves the largest hospital!—and handling of food trays is largely eliminated—service is speeded up to an astonishing degree.

This more modern, more efficient method is called the Thermotainer System.

How It Works

Designed especially for hospital service, the Thermotainer Hot Tray Conveyor Cabinet operates on standard electrical current and employs vital new methods of preserving hot foods.

Steam and water are entirely eliminated and foods are kept in sealed compartments, warmed by heated air that never touches the food itself. Thus food deterioration is practically stopped. For, kept with original heat and individual moisture content intact, every food must remain fresh as when newly cooked. Every nourishing, tempting quality of each food is retained for many hours!

3 Special Types

Thermotainer Hospital Conveyors are

made in 3 types. (Each finished in modern sanitary Monel metal). A Drawer Conveyor for plate service. Tray Conveyor to use when tray preparation is completed in the kitchen; and the Inset Conveyor, designed to carry food for



service in corridors. (Also furnished in stationary type to replace steam table in diet kitchen.)

Let Us Analyze Your Needs

Every Thermotainer installation is engineered to meet the needs of the particular service it covers. We should be glad to analyze your food service system for you, showing what other hospitals are doing on similar problems, and submitting blue-prints of special Thermotainer Units for your individual plan. Simply write, on official letterhead, to nearest office listed below.

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Dept. 00, 219 North 2nd Street,
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Eastern Sales Office: Hector C. Adam Corp.,
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System Includes

Roll Warmers. 2, 3 and 4 drawer Stationary and Conveyor types. Preserves rolls, pastry and bakery goods in fresh and hot condition for hours.

Hot Food Conveyors. To serve any number of people at a distance from the kitchen. For banquets, room service or hospital use.

Cafeteria Service Counter. Replaces the steam table for displaying and serving meats, vegetables and rolls in efficient and sanitary manner. Ideal for nurse's cafeteria.

Kitchen Units. Replace steam tables for storage of food in the kitchen, or in diet kitchen.

A Unit of

The THERMOTAINER System

(U. S. patented, registered, copyrighted)
Made under Johnson Patents by the Waters-Genter Co.

Makers of the Famous Toastmaster

265

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and
Housekeeping Problems

Conducted by C. W. MUNGER, M.D., Director,
Grasslands Hospital, Valhalla, N. Y.

Pointers on Solving Maintenance Problems

MAINTENANCE problems of a hospital never end. Much of the grief in the life of the superintendent, as well as that in the life of the engineer or the department head responsible for the upkeep of physical equipment, is due to the emergencies and to the constant repairs necessary for equipment and machinery.

Here, more than in any other function of hospital administration proper, system is important. The details of the system will vary with the size of the institution, the training of the superintendent and of the responsible department head and the size of the force of workmen assigned to these duties. But in all cases, a proper planning of the work of inspection and a careful system of records will cut the costs of maintenance and save time.

Responsibility for maintenance should be centralized in a single official. He may be called the mechanical director, director of service, maintenance engineer or any other suitable title. The title does not make much difference as long as the work is properly performed. In smaller hospitals, of course, the chief engineer will be responsible for all maintenance work. In all cases the mechanical director should have charge of the operating engineers, carpenters, steam fitters, plumbers, electricians, utility repair men and such workers. He should supervise all physical equipment, mechanical equipment, the power plant and the engine room.

Accurate records of all mechanical equipment are important. History cards similar to those for hospital patients should be maintained. These may be the standard five by eight cards, made out in duplicate—one for the superintendent's office and one for the mechanical director. These cards should carry the following data: name of article of equipment; name, address and telephone number of the manufacturer; name of the individual who gives service on the article; cost and date of purchase; manufacturer's estimate of the article's proper length of service; service record; and on the reverse side, the manufacturer's directions for the care and use of the article.

The service record should carry at least the cost of major repairs and new parts. Complete details of all repairs are preferable. If the manufacturer's instructions are too lengthy to be entered in full, the major points may be outlined on the reverse of the card and the full instructions may be kept in a separate file. In case the hospital is building a new plant, the architect

should assemble all charts, documents and directions in duplicate for every piece of mechanical equipment and turn them over to the superintendent, or to the board of trustees if the superintendent has not yet been chosen.

Inspection is often neglected by superintendents who are not mechanically minded. If these administrators prove too lax in their attention to maintenance of the equipment, their carelessness will prove contagious and the mechanical director will slacken his own efficiency. Regular reports at frequent intervals will keep the mechanical director on the job if the superintendent himself lacks time to undertake routine inspections.

Report forms that list by floors or buildings each machine and piece of equipment requiring inspection should be prepared. The time and sequence of daily inspection tours should be so arranged that the entire plant can be covered in five or six days. Only such equipment as needs regular adjustment, lubrication and cleaning should be placed on the form. Plenty of space, however, should be left for notations of work on unlisted items. A portable kit containing an oil can, wrenches, other tools and supplies will take care of many small adjustments that can be made in a moment's time while the equipment is being inspected. Some mechanical directors find a blackboard a big help in mapping out the assignment of repair jobs to the different members of their crews.

Of course, the frequency of inspection will vary with the type of equipment. As an example, consider power plant equipment. In order that the inspection may be properly scheduled, the equipment should be divided into groups according to the frequency of its need for inspection. Such a division might be according to the following tentative outline:

Daily Inspection

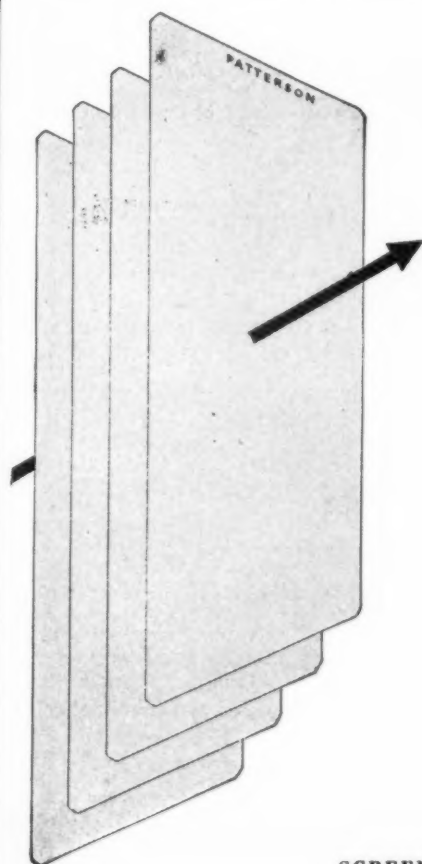
Steam traps: Examine for leaks and also see that trap is not blowing through. Be sure that trap is clear of mud, lime and soda ash.

Stoker engines: Look for loose, defective, or slipping bolts. Inspect governor. Examine for proper lubrication. Clean out drains from crank pump and engine base. Wipe off engine.

Water softener: Look over chemical pump. See that chemical lines are clear. Inspect float control on heaters.

Softener heaters: Clean trays; inspect condition of angle irons; see that outlet is clear of chemical.

No. 6



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They permit the radiologist to use cassette after cassette without giving a thought to the screens.

Approved methods of mounting and cleaning and directions for proper care of intensifying and fluoroscopic screens are presented in our booklet "For Better Results from X-ray Screens." We will gladly send you a copy.

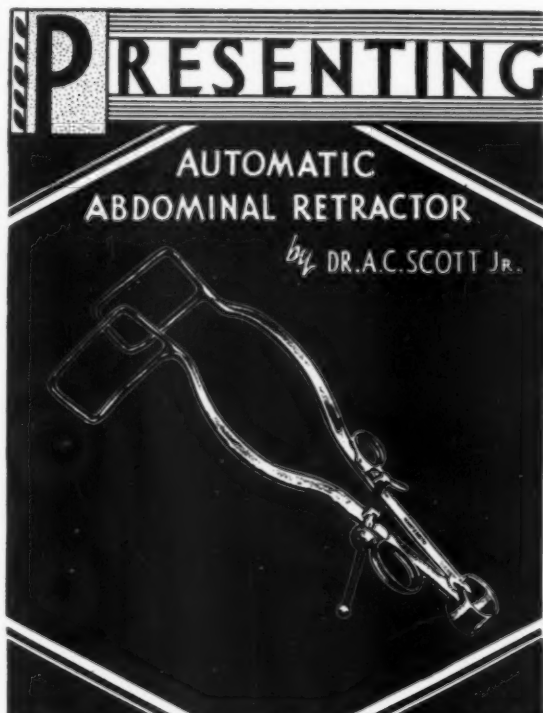
And all Pattersons are fast . . . grainless . . . free from lag . . . cleanable . . . extremely strong and pliable. These features which assure consistent satisfactory results, make Patterson Intensifying Screens the choice of leading roentgenologists, the world over.

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Patterson
X-RAY
Screens

INTENSIFYING — FLUOROSCOPIC

SCREEN SPECIALISTS FOR MORE THAN 16 YEARS



This retractor is provided with a quick-lock screw adjustment. This device holds the retractor open at any point, and maintains an even pressure at the blades.

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Doehler is the new and different metal furniture made in a beautiful Period design, and in such soft pastel colors and realistic wood-tones that even the eye of the expert cannot distinguish it from wood.

Doehler furniture will not chip, warp, or crack. Easily cleaned with soap and water, no matter what is spilled. Drawers open and close quietly and easily. Inexpensive, because maintenance costs are nil—and because its life is measured in decades rather than in years.

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Automatic stop and check valves: Pack if necessary; oil moving parts and operate manually to see that valve is free.

Monthly Inspection

CO, machines: Check with the hand orsat; blow out gas line and clean instrument.

Stack temperature: Check with pyrometer and adjust if necessary.

Steam flowmeters: Check on zero and maximum points; check on intermediate points with integrator.

Boiler feed pump: Take off top halves of turbine and pump and inspect.

Oil filters: Change filter cloths and clean gauge glasses.

Safety valves: Test by raising pressure on boilers; adjust if necessary.

Semi-annual Inspection

Coal conveyor: Inspect for tension and defective wheels or buckets.

Coal hoppers: Inspect for corrosion.

Stack: Remove soot from base.

Annual Inspection

Air washers: Inspect screens and bafflings.

Oil switches: Remove oil tank; inspect contacts; filter oil, renew if necessary; test control.

Water filters: Remove sand and wash thoroughly; inspect stay bolts and general internal condition of filtering tank.

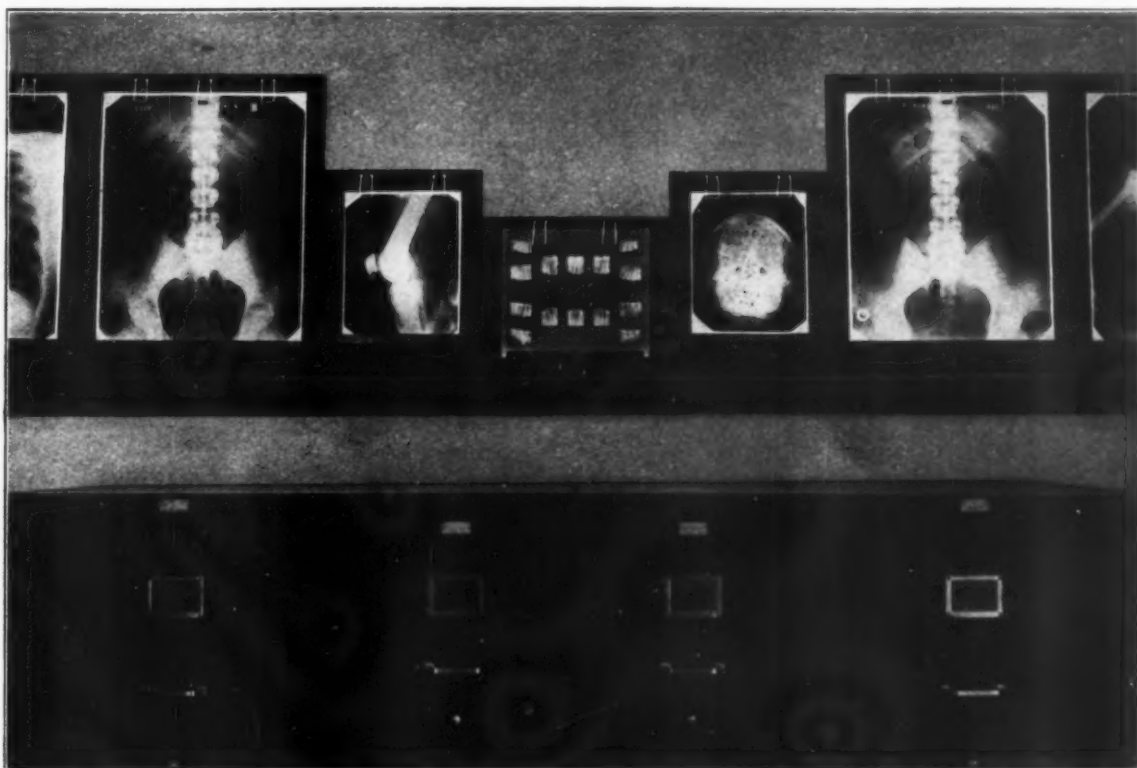
Lightning arrestors: Inspect and recharge.

This list is incomplete, of course. But it illustrates the idea of an inspection schedule which should be carefully worked out to meet the equipment needs of each individual institution.

Electrical repairs and maintenance if treated in detail would demand a separate article by themselves. Fuses give perhaps the most trouble. Before replacing a fuse which has blown out, the circuit it protects should be carefully examined to determine, if possible, the cause of the "blow." Trouble in power circuits can usually be traced to the motor or starter. Trouble in lighting circuits is more difficult to trace because of the large number of different openings and fixtures used. Short circuits are sometimes caused in lighting fixtures by screwing a lamp in so tight that the socket is turned on the fixture, thus twisting the wire so that the insulation is broken, which causes the two wires to "short" or ground. Extension cords and floor lamps should be carefully examined to see that there are no broken or bare wires to cause a ground. A fuse will sometimes blow out on account of poor contact which causes it to heat; it is, therefore, advisable to see that there is good contact.

Considerable economies in the lighting system may be effected if careful inspection is regularly made. Old bulbs, especially carbon ones, use extra current and should be replaced. Lamps of high candle power should be used only where they are required for reading or other justifiable purposes. Fixtures should be cleaned regularly, especially when the unit is of the inverted type.

Continuity of service and the economical operation of any rotative machinery depend upon proper lubrication and the selection of proper oil, which should be kept pure by careful handling and frequent examination. When bearing trouble develops, a shutdown of the machine usually results. Replacement of the bearing and turning up of the shaft are often necessary. It is essential that oil of the proper viscosity should be used. Some bearings require heavier oils than others. The temperature at which a machine ordinarily runs must also be considered as well as the speed at which the shaft turns.



Reduce Glare—Save Current Reduce Heat

PROPER illumination for diagnosing radiographs should be evenly diffused, uniform, and bluish-white in color . . . Even the faintest details should be made clear and distinct. These qualities will improve the appearance of the radiographs and make the accurate diagnosis of pathological conditions possible.

You can modernize your Interpreting Room by the installation of an attractive and adequate battery of inexpensive Eastman X-ray Illuminators, which fulfill all interpretation requirements.

They eliminate the glare encountered in the use of large viewing cabinets as each is controlled by an individual switch. Current cost is cut as only the required number of lamps are used for viewing; this feature also adds comfort in the summer as the natural heat due to burning a series of high wattage lamps is not present.

Eastman Illuminators may be had in three sizes—14 x 17 vertical, 8 x 10 vertical, and 8 x 10 horizontal. Your dealer has them in stock.



Eastman Kodak Company, Medical Division
343 State Street, Rochester, N. Y.

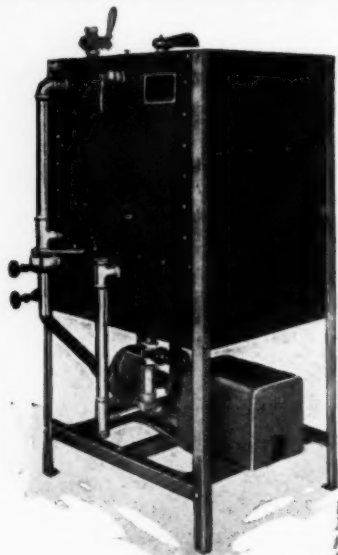
Gentlemen:

Please send me your free booklet, "X-rays in Medicine," which I understand contains a complete catalog of Eastman products for radiography.

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HOW CAN WE GET CLEANER DISHES AT LESS COST?



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FOR over thirty years the name "Blakeslee" has been synonymous with efficient dishwashing machinery, and the Blakeslee-built Victor Dishwashers of today embody all the refinements and improvements that our experience has shown us are necessary to meet the dishwashing requirements of hospitals, large and small.

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A Victor also does its work cheaply. It uses about 50% less hot water than any dishwasher of equal capacity, because of the Patented Two-tank Overflow Feature. The Victor is easy to clean. Anybody can operate it. No doors, valves or faucets to regulate.

Here is the Victor method of operation: a tray of dishes enters the machine, passes under (1) a powerful top and bottom pumped wash; (2) a pumped rinse; (3) a final sterilizing rinse—coming out immaculately clean. The No. 10 Automatic Victor delivers 300 gallons of water per minute on the dishes, under 10-lbs. pressure. That explains Victor speed and thoroughness.

Write and ask us about the machine that will wash your dishes cleaner at less cost. Just state the average number of meals you serve.

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Sterilizing equipment does not require a great amount of mechanical attention but it should be gone over frequently. Valve stems should be packed unless packless valves, which are very satisfactory, are used. Steam supply must be constant and pressure not higher than that which the equipment will safely carry. Automatic regulators should be in operating condition and safety valves should relieve at the proper pressure. Steam pressure gauges on all sterilizers should be tested frequently; a low gauge reading may indicate insufficient sterilization.

In the kitchen, gas heated bake ovens or cooking ranges are wasteful if the burners are not properly adjusted and the dampers not regulated. Pressure of steam for kettles and similar equipment must be constant and not above that for which the equipment is made. Kitchen or mixing machines must be carefully cleaned and oiled daily. Exhaust fans and ducts must be inspected and cleaned to prevent fire. Steam tables should be cleaned occasionally and heavy scale removed to prevent rapid deterioration of steam coil and lining and also to maintain proper operation. The iron work of a steam table should be painted frequently to prevent erosion as well as for sanitary reasons. Valves, gauges and draw-off cocks on coffee and tea urns need mechanical attention to prevent leakage. Steam vegetable cookers should be cleaned daily to keep the drain lines from becoming choked with vegetables.

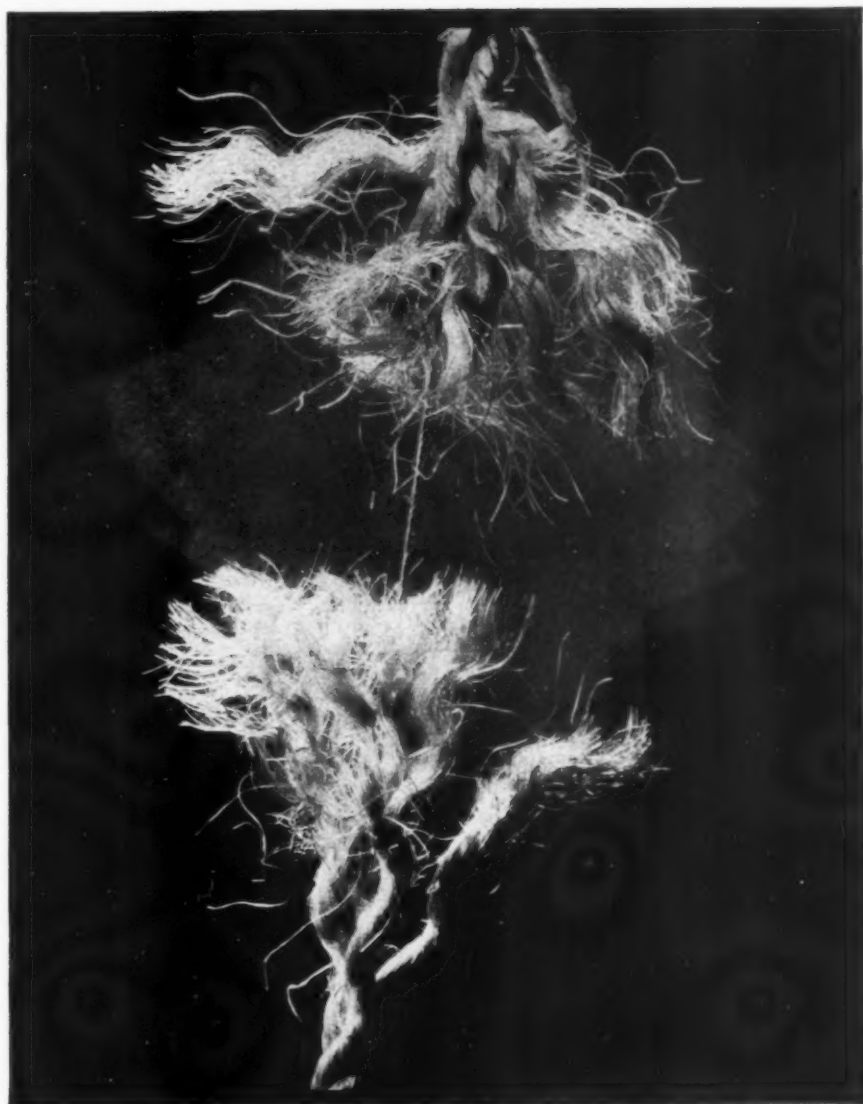
Heat Leaks Are Costly

Heat leaks comprise one of the greatest invisible cost boosters in the average hospital. Many of these leaks occur through poorly fitting windows. Weather strips can be applied to take care of the cracks around the windows. If there are cracks at the top and bottom of an outside door, a strip of cloth should be nailed to the door. If hinges are not properly fitted into the door and frame, they should be reset. Basement doors and windows, which are often neglected, should be made tight. Windows should be locked when they are closed, and heat should be turned off in unused rooms or at night when the windows of occupied rooms are open. In all these ways, each seemingly small in itself, the aggregate total of savings in fuel can be made a considerable amount.

Similarly, if everyone would turn off faucets and valves tightly after use, this practice to a large extent would prevent the wearing out of the discs and seats of these fixtures. Leaking faucets and valves are not only annoying but wasteful and should be repaired as soon as possible.

The care of screens and awnings is important. They should be marked with simple symbols to identify their location and the corresponding symbols should be placed on the proper window frames. Awnings should be taken down in the Fall, reconditioned and stored in a clean, dry place. During the winter, screens should be carefully repaired. Some users of copper netting screens leave them up both summer and winter. They claim that the exposure to winter weather is less damaging to the screens than their removal, storage and reinstallation would be.

Identification of pipe lines will prove helpful in maintenance of the boiler room. A paint color scheme has been recommended for this purpose by the American Society of Mechanical Engineers as follows: high pressure steam, white; exhaust steam, buff; low pressure fresh water, blue; boiler fed fresh water, blue and white; salt water, green; compressed air, gray; fuel oil, black; gas, aluminum; brine lines, white and green. The initial cost is the only expense of this system, and it makes possible a distinct saving in workmen's time. However, some maintenance men oppose it on the ground of expense.



WHEN A FRAGILE LIFE HANGS BY A SLENDER THREAD

WHEN life and health are at stake there dare be no compromise with quality. Surgical instruments, medical supplies and sick room sundries must be thoroughly dependable, whatever crisis they are called upon to meet. The Davol Rubber Company recognizes the responsibility involved in the manufacture of rubber sundries. We accept that responsibility. Consequently, there has been no deviation from the strictest standards of high quality since the Davol business was begun fifty-six years ago. The Davol Rubber Company is the largest exclusive manufacturer of rubber goods for use in the hospital

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The ST. FRANCIS HOSPITAL
Hartford, Connecticut
 has Doubled and Re-doubled
 its original installation of the
NURSES' SIGNAL-PHONE SYSTEM



ST. FRANCIS HOSPITAL
 Sister Valencia, Superintendent

IN February, 1928, the first Nurses' SIGNAL-PHONE System was installed in the St. Francis Hospital, Hartford, Conn.

In the fall of 1928 this progressive institution doubled the size of its original installation.

In December, 1929, additional equipment was ordered, again doubling the former capacity.

* * *

HERE, indeed, is a *result* story! . . . Indisputable testimony to the merit of the Nurses' SIGNAL-PHONE. But it is by no means an isolated case. In every quarter the nation's leading hospitals are now turning to this remarkable system to simplify the entire communication problem between nurse and patient.

The Nurses' SIGNAL-PHONE provides, in addition to the customary features of door and pilot lamps and signals at the nurses' station, a unique telephonic contact made possible by the super-sensitive Dictograph microphone and "soft speaker." In every way it meets the most exacting requirements of modern nursing procedure.

Write for the folder which describes and illustrates the Nurses' SIGNAL-PHONE System in greater detail.

DICTOGRAPH PRODUCTS CO., Inc.
 220 WEST 42nd ST., NEW YORK

In such a case, where it does not seem practical to paint all of the piping, the maintenance man should certainly identify all pipes with an arrow stencil. Thus an arrow of the proper color can be painted on each pipe. Incidentally, the arrow pointing in the proper direction will indicate the direction of flow of the pipe line.

Repairs needed in any part of the building should be approved by the proper department head—the nurse supervisor, the housekeeper, or some other official. Repair requisitions should be made out in duplicate—one for the employee assigned to the job and the other for the mechanical director. The department head for whom the work is done should sign the requisition to show that the repair has been properly made. Record of the time required and materials used should be entered on the requisition.

In case of emergency, the repair request should be telephoned immediately to the mechanical director and the written requisition should follow as rapidly as possible. Such events as broken window panes in patients' rooms, obstructed toilets, obstructed waste lines in kitchen sinks, and broken equipment such as sterilizers, dishwashers, peelers and other electrically driven kitchen machinery are all rush jobs. Hospital personnel must be careful to refrain from claiming that repairs are emergency when in reality there is no urgent need for them. Otherwise they will be unable to secure the cooperation of the maintenance men when a genuine emergency arises.

Most hospitals of any size maintain their own machine shop for repairs. Large hospitals find it profitable to have on the mechanical crew a sheet metal worker who repairs tin roofs, gutters, leaders; mends pots, pans, and utensils including sterilizers, oil and water tanks; makes bake pans and utensils, canopies, steam jackets, radiator hoods and covers; repairs metal top tables; relines ice-boxes and does a multitude of other repair jobs.

Likewise, hospitals find it worth while to maintain their own carpentry and paint shops. Since these divisions are used chiefly for furniture, we shall only mention them here and postpone detailed discussion to the section which deals with furniture.

Many manufacturers of specialized equipment give regular service in the maintenance of their products. This is especially true of sterilizers, x-ray and other therapeutic equipment. Wherever possible this service should be used since it is far more expert, especially in the case of some of the intricate therapeutic machinery, than are the services of the comparatively ignorant and always overworked maintenance man of the hospital. In all cases, the manufacturer's directions regarding lubrication, adjustment, pressures and loads should be carefully followed.

New Chemical Compound Available for Bleaching and Sterilizing

True calcium hypochlorite in the form of a dry, stable, highly concentrated powder has now been produced as the result of seven years of research by the chemists and engineers of a well known chemical company. This newest form of chlorine is a convenient means of supplying bleaching and sterilizing solutions.

That the new product fills a long felt need in the hospital, is pointed out by the manufacturers. It offers, they say, a means of preparing absolutely accurate Dakin solution at a reasonable cost and without the necessity of frequent testing. Limited tests also indicate that the Dakin solution thus prepared possesses more desirable physiological properties than that formerly made up.

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Harper Hospital, Detroit, Mich.	St. Elizabeth's Hospital, Youngstown, O.
Battle Creek Sanatorium, Hospital Dept., Battle Creek, Mich.	Wilkes Barre Hospital, Wilkes Barre, Pa.
Evanston Hospital, Evanston, Ill.	Elizabeth Horton Memorial Hospital, Middletown, N. Y.
Presbyterian Hospital, Chicago, Ill.	St. Joseph's Hospital, Orange, California
Christ Hospital, Cincinnati, Ohio	St. Luke's International Hospital, Tokyo, Japan.
St. Luke's Hospital, Cleveland, Ohio.	General Hospital, Rochester, N. Y.
St. Mary's Hospital, Knoxville, Tenn.	Western Hospital, Toronto, Canada.
United Hospital, Port Chester, N. Y.	Valley Hospital, Sewickley, Pa.
Prospect Heights Hospital, Brooklyn, N. Y.	Providence Hospital, Detroit, Mich.
Coaldale State Hospital, Coaldale, Pa.	John R. Proctor Hospital, Peoria, Ill.
St. Elizabeth's Hospital, Dayton, O.	Holmes Memorial Hospital, Cincinnati, O.
Belmont Hospital, Chicago, Ill.	St. Mary's Hospital, Detroit, Mich.
Elizabeth Steele Magee Hospital, Pittsburgh, Pa.	Chronic Disease Hospital, Cincinnati, O.
West Suburban Hospital, Oak Park, Ill.	Brooklyn General Hospital, Brooklyn, N. Y.
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Hurley Hospital, Flint, Mich.	Roosevelt Hospital, New York City.
St. Mary's Hospital, Grand Rapids, Mich.	Passavant Hospital, Pittsburgh, Pa.
St. Christopher's for Children, Philadelphia, Pa.	Jewish Hospital, Cincinnati, Ohio.
St. Joseph's Hospital, Chipewawa Falls, Wis.	St. Mary's Hospital, Knoxville, Tenn.
Saginaw General Hospital, Saginaw, Michigan.	St. Vincent's Hospital, Toledo, O.

These, and hundreds of other hospitals, have purchased Spring-Air—all on the basis of its being the most comfortable, sanitary, convenient, durable and economical mattress ever developed for hospital use. Now made exclusively, under Karr patents, by the foremost masters of the bedding craft.

MASTER BEDDING MAKERS OF AMERICA

Your present mattresses can be conveniently and inexpensively converted into modern Spring-Air. Write to Charles Karr Co., Holland, Michigan.



You'd hardly call this a Vacation

DON'T try this on your golf course. The green's committee might object. And besides it might have a tendency to throw you off your game.

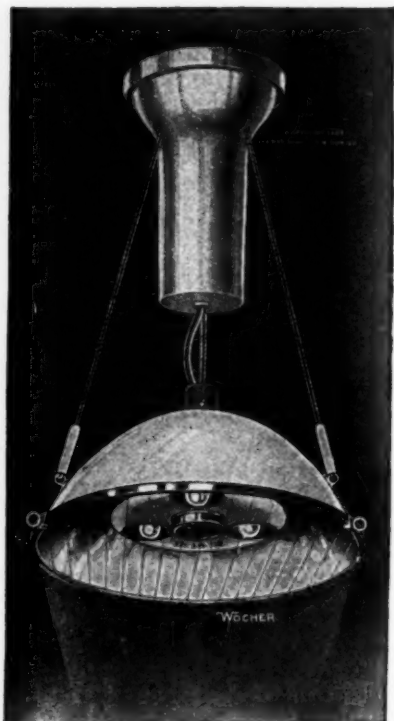
Vacations are supposed to be restful. Little worries can spoil the days and make the nights hideous—little worries such as wondering if everything is moving smoothly back at the hospital. A few weeks before you go away check over supplies and equipment. Make sure your institution will be supplied with everything needed to do effective work during your absence. Place an order—using our catalog, of course. We will make shipments at any time you desire. We'll appreciate the opportunity of serving you by taking care of your little worries while you're gone. It should make your vacation pleasanter.

WILL ROSS, Inc., 457-459 East Water Street, Milwaukee, Wisconsin

WILL ROSS
HOSPITAL SUPPLIES



THE RIES-LEWIS OPERATING LIGHT



A FEW REASONS FOR CHOOSING THIS LIGHT

1. It throws a clear, shadowless light that is of correct intensity, that eliminates glare and eyestrain and that successfully diffuses shadows that are ordinarily cast by the head or hand of the operator.
2. The emergency features engender a sense of security which dispels all fear of accident through failure of the lighting circuit.
3. It is a pleasure to take care of this light. It requires no attention other than an occasional removal of dust or replacement of a lamp.

For convenience in cleaning the wired glass protection screen is hinged, giving access to the interior of the lamp without the necessity of removing the entire screen.

4. No glass mirrors or reflectors are used. Everything has been done to make this fixture as durable as possible.

Send for our new descriptive folder

THE MAX WOCHER & SON CO.

Surgical and Hospital Supplies

29-31 W. 6th St.

CINCINNATI, O.

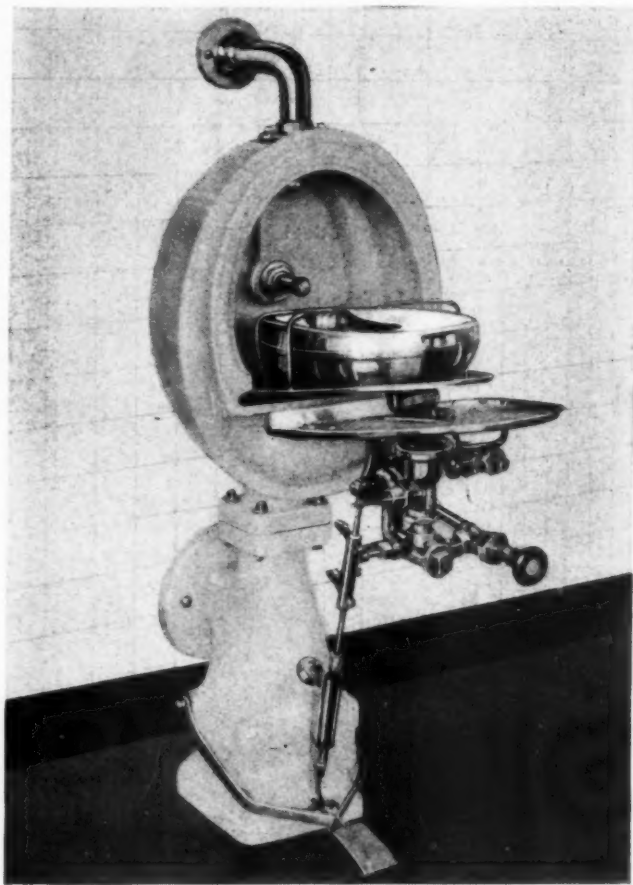
The new compound is also finding useful applications as a bleaching and sterilizing agent in the hospital laundry, as a disinfectant and deodorant in the hospital kitchen and for general disinfecting purposes.

"While the advent of this chemical compound represents a new trend in the distribution and application of chlorine," say the manufacturers, "the principal effect of such a trend will probably be an extension of chlorine's present usefulness to new fields and new applications. Liquid chlorine will continue to be the medium through which the tonnage consumer will be served, with true calcium hypochlorite as the accepted chlorine carrier for many special purposes and for the user of more limited quantities."

A New Bedpan Washer With Many Distinctive Features

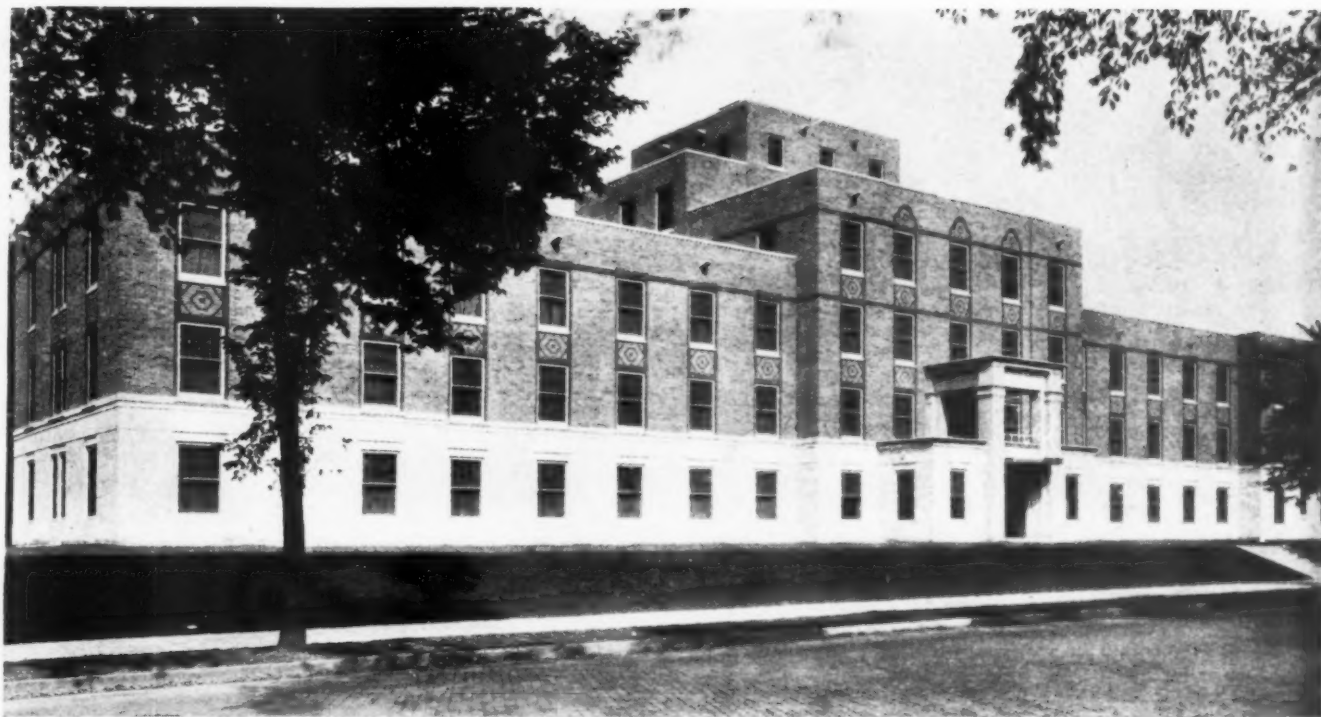
As a result of years of careful experimenting, research and development, there has been made available for hospitals a bedpan washer that makes the disposal of the bedpan contents sanitary, odorless and practical.

The new bedpan washer is made of an exclusively processed, double fire vitreous china, that is chipproof and acidproof. The door is constructed with a baffle plate



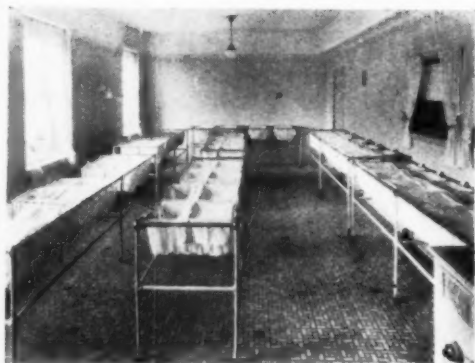
This bedpan washer is made of a processed, double fire vitreous china.

which prevents leaking. The door opens by means of a pedal, equipped with a check to lower it noiselessly. There are no exposed pipes. There are two sprays, one that flushes the interior of the pan and one that washes the outside of the pan and the walls of the washer. An air break prevents infected water or material from syphoning back into the water lines.



Exterior of the beautiful new Swedish Hospital, Minneapolis

The Modern Hospital Is Clean...



The nursery—Swedish Hospital, Minneapolis, where Midland Babeoleum is used.



The imposing lobby of the Swedish Hospital, Minneapolis.

The many millions of dollars are being protected by intelligent maintenance programs.

THE Midland Chemical Laboratories have been active in the field of building maintenance for over a quarter of a century and have perfected chemical cleaning products designed for specific purposes and scientifically compounded. For instance, in the Swedish Hospital at Minneapolis a surpassingly fine institution, modern in every department, the tile marble and terrazzo installations are cared for with MIDLAND TILEOLEUM. They and hundreds of others have found this method of upkeep the most efficient and economical.

Among the high quality hospital products manufactured by Midland is BABEOLEUM the perfect baby soap, absolutely pure, neutral with quick cleansing action. The coupon below will bring you a generous sample of this fine baby soap.

Fill it out and mail to-day—no obligation

**MIDLAND CHEMICAL
LABORATORIES, INC.**
DUBUQUE, IOWA

Midland Chemical Laboratories, Inc.,
Dubuque, Iowa. Dept. M 6.

Gentlemen: Please send me large sample bottle of Midland Babeoleum, The Perfect Baby Soap.

Hospital City State
Name Position

This new dish tempts half-hearted appetites

Chocolate Souffle with Cream of Wheat

$\frac{3}{4}$ cup cooked Cream of Wheat 3 eggs
 $\frac{1}{2}$ cup milk $1\frac{1}{2}$ squares chocolate
 $\frac{3}{4}$ cup sugar $\frac{1}{2}$ teaspoon vanilla

Mix cooked Cream of Wheat with milk, sugar, well beaten egg yolks, and melted chocolate. Flavor with vanilla and fold in stiffly beaten egg whites. Bake in a moderate oven and serve with cream.

DIETITIANS are kept busy contriving concoctions for patients' meals. For people lying in bed day after day are more than ever hard to please, and their appetites most discriminating.

Dishes must be prepared with untold care and ingenious thought to make them both nourishing and appetite awakening. One way to do this is to use a cereal base combined with other foods. An ideal cereal for the invalid's diet is Cream of Wheat.

A dish which quickly arouses downcast spirits is the one given above, Chocolate Souffle with Cream of Wheat.

Renewed appetites give their prompt approval to its rich tenderness. When each mouthful rapidly disappears nurses are well pleased. They realize that its Cream of Wheat base, so high in carbohydrate content, is rich in nourishment. And most important, Cream of Wheat is so amazingly easy and quick to digest that it is utterly without tax on weakened digestions.

Keep a box of Cream of Wheat on the diet shelf ready to use for just such tempting dishes. Each triple-wrapped, triple-sealed carton holds forty generous servings at less than one cent each.



FOR THIRTY-THREE YEARS A STANDARD
FOOD ON PHYSICIANS' DIET LISTS

Cream of Wheat

The Cream of Wheat Corporation

Minneapolis

Minnesota

In Canada, made by The Cream of Wheat Corporation, Winnipeg

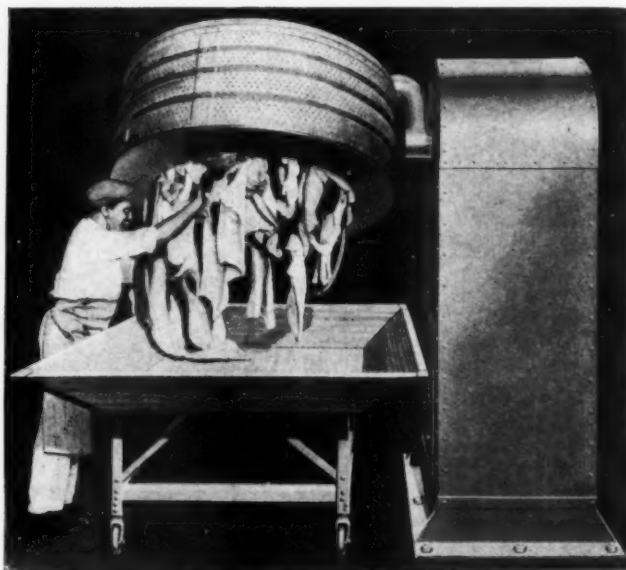
The flush valve is automatically operated when the bedpan is placed and the door closed. A foolproof automatic shut-off instantly cuts off the water supply should the door be opened while the pan is being cleansed. A hot water supply connection assures a thorough cleansing of the pan when oil enemas have been given. The trap and pedestal are adjustable in height to provide for any variation in the floor and difference in the location of the wall waste outlet.

The washer is attractive in design. It may be had in two models—the free standing model and the recessed.

New Dump Outfit Is Perfected

What has been termed the missing link in the chain of equipment for modern laundry plants, is a new dump outfit that has been perfected recently. This device handles the extractor basket mechanically, dumping the entire load all at once. It thus saves the time and labor of emptying out the clothes by hand and makes possible a large increase in daily output without any additional laundry help.

As shown in the illustration, the outfit consists of an electrically operated dump mechanism, enclosed in a sturdy, rigid pillar base from which a solid steel canti-



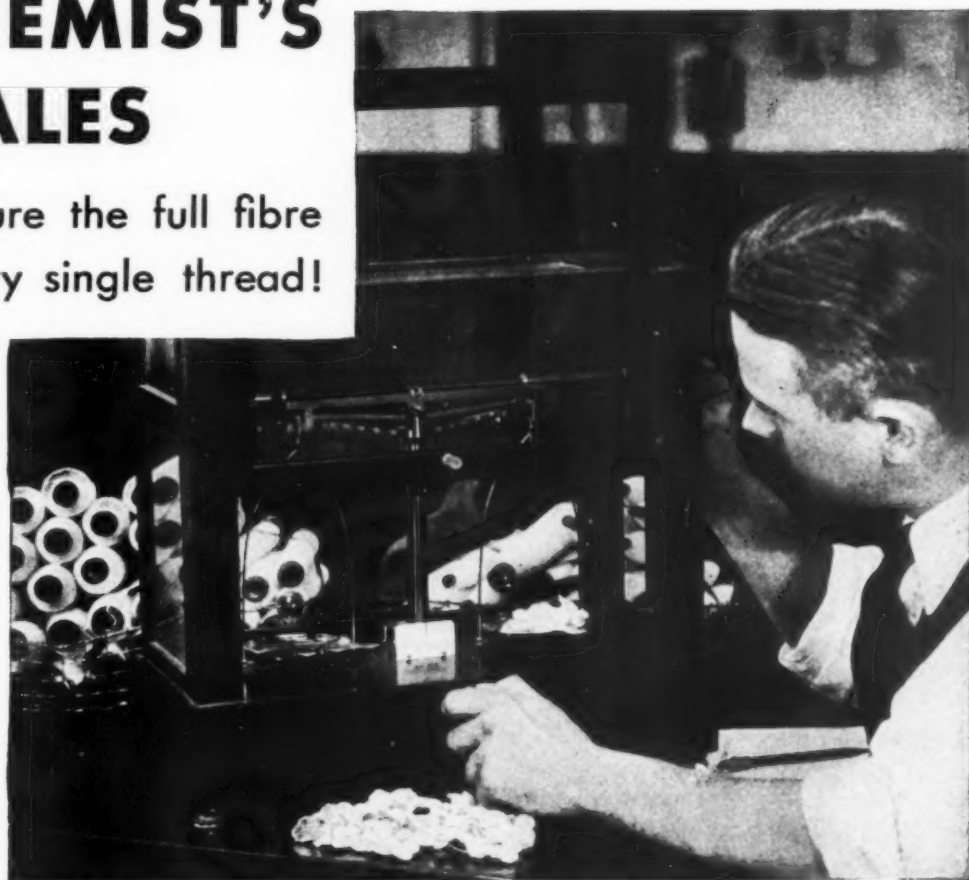
This laundry dump outfit handles the extractor basket mechanically, dumping the entire load at once. The operator has free access all around the basket.

lever arm projects for holding the extractor basket. A traveling hoist arrangement, running overhead, is utilized for transferring the loaded basket to the dump arm. The basket is locked to the revolving arm, then turned over by button control, and the clothes are dumped in a mass upon the wheel truck. The operator, it will be noted, has free access all around the basket.

The whole operation takes only a few moments, and requires only one man to do the job. All unnecessary handling and hard work are eliminated, with a resulting speed-up of production. The outfit is ruggedly built throughout to stand continuous heavy duty service and to hold maintenance cost down to a negligible figure. A standard removable basket is used, so that all the advantages in the design and structural strength of a regular extractor basket are retained. The gears, motor and the chain drive mechanism are fully enclosed. Easy, instant control is provided by push buttons for start and stop.

PEQUOT SKEINS ARE WEIGHED ON CHEMIST'S SCALES

To insure the full fibre
content of every single thread!



YOU yourself know these accurate balances. Skeins of Pequot thread are constantly being weighed on them—to make sure that every thread has its full, strong quota of long tough cotton fibres. The Pequot thread is scientifically tested at every stage of manufacture. It must be *extra* strong, so that the fabric, which is made up of thousands of these threads, is extra strong.

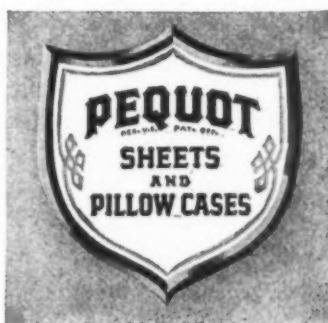
The Pequot label has come to mean *uniformly* longer wear, particularly where wear is hardest, as in hospitals. Pequot sheets are guarded from cotton bale to shipping platform to keep that reputation.

On your beds, in your laundry, this exacting care means long-enduring *economy*.

Pequot sheets are, as a result, used *more* by hospitals than any other brand.

‘ ‘ ‘

Pequot Mills, Salem, Mass. *Name-woven* Pequot sheets, and *reversible* Pequot Sheets (equal hems at both ends) upon order. Parker, Wilder & Co., Selling Agents: New York, Boston, Chicago, San Francisco.



PEQUOTS ARE USED MORE BY HOSPITALS THAN ANY OTHER BRAND OF SHEETS

SEPTISOL

SOAP AND DISPENSERS

The last word in hygienic cleanliness — protects the Surgeon against infection. Septisol Dispensers eliminate the handling of soap or dispensers, therefore giving absolute safety.



Dispenser is easily attached to wall. Dispensing tube adjustable to any position. Absence of any valves or movable parts insures satisfactory and steady service. Slight pressure of foot gives correct amount of soap. Positive in operation. Pneumatic pressure does the work. Portable foot plunger offers no interference in cleaning or mopping.

SEPTISOL Soap penetrates and cleans the pores, leaving the skin smooth and pliable. It is pleasing and efficient —



VESTAL CHEMICAL COMPANY
ST. LOUIS, U.S.A.

Economical too — One gallon can be diluted with three to four gallons of water. Write for particulars.



Speeds cleaning... lowers costs

HOUSEKEEPERS in many large hospitals have reduced time and effort on the various cleaning tasks under their supervision by using Oakite for all cleaning.

In your institution, too, these results can be obtained. You can clean painted walls and woodwork, beds, tables and other hospital fixtures quickly and easily the Oakite way. No hard scrubbing. A little quick-working Oakite in warm water is all that is needed. Applied with a cloth or sponge this safe, effective solution leaves a path of cleanliness at every stroke. The time, effort, and material saved are sure to reduce the cost of doing any cleaning job.

Let our nearby Service Man tell you more about Oakite cleaning methods. Write and ask to have him call. No obligation.

Oakite Service Men, cleaning specialists, are located in the leading industrial centers of the U. S. and Canada.

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18A Thames Street, NEW YORK, N. Y.

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Industrial Cleaning Materials and Methods

REZISTAL KA-2

"NIROSTA"

|| HEAT TREATED UNDER STRAUSS PATENTS ||
|| WITHOUT COMPROMISE ON TEMPERATURE ||



REZISTAL KA-2

A homogeneous high chrome-nickel alloy, not a plated surface which will chip or wear off.

Stronger than ordinary steel, and has high heat and abrasion resistance.

Specially heat treated before shipment from our plants.

Resistant to most corrosive media.

IS Not subject to any corrosion in the preparation of food and will not alter the flavor nor impart a metallic taste.

Easy to clean and does not require expensive cleaning compounds to restore its natural lustre, but merely a soft wiping cloth.

Supplied in most commercial forms, and can be stamped, spun, machined, riveted, soldered, brazed and welded satisfactorily.

REZISTAL KA-2

IN THE MODERN HOSPITAL

Kitchen and Food Service Equipment, such as dish and tray trucks, steam tables, roll warmers, inset covers, coffee urns and stand tops, plate warmers, dish washers and dryers, gas and electric ranges, cabinet trim; serving benches, tables and wagons; milk equipment, trays, trim, utensils, etc.

Anaesthetists' Tables

Architectural and Ornamental Work

Hardware

Instruments

Laundry Equipment, Washers, Ironers, Chutes, etc.

Sterilizing Equipment, X-Ray Equipment and many other uses.



Dish and Tray Truck of REZISTAL KA-2
By Jarvis & Jarvis, Springfield, Mass.
For St. Luke's Hospital, Tokyo, Japan,
Percy Clark Quintard, Kitchen Plan Consultant.



CRUCIBLE STEEL COMPANY OF AMERICA

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Ideal Food Cart Service

is now widely used for these 9 Important Reasons

No hospital can overlook the standardized Ideal Food Conveyor System for the quick, economical performance of the hospital's chief NON-MEDICAL SERVICE—that of feeding patients properly. And Ideal Food Conveyors are today the standard of efficient service.

They contain improvements or features which are not available in any other similar type of conveyor. These features assure long time, uninterrupted service and less operating cost.

We may be able to help you in the improvement or development of your hospital food service. During 15 years of pioneer effort with this vital hospital problem, we have been of help to more than 1,000 prominent hospitals.



Used in More Than
1,000 Leading
Hospitals

START WITH ONE CONVEYOR!

An Ideal System consists of one or more conveyors, each engineered to meet the particular problem encountered. Many hospitals started with ONE conveyor to handle some difficult problem. Their experiences invariably have led them to adopt the complete system because of its many economical advantages.

Investigate this *better* food service. Full details for the asking—without obligation.



The SWARTZBAUGH MFG. CO., Toledo, Ohio *Established 1884*

Associate Distributor: The Colson Stores Co., Cleveland, Ohio

with branches in
Baltimore Chicago Boston Cincinnati Pittsburgh
Buffalo Detroit New York Philadelphia St. Louis
Pacific Coast General Office and Warehouse, Los Angeles
Operating Branch Sales and Display Rooms, CANADA
San Francisco, Tacoma, Portland The Canadian Fairbanks-Morse Co., Ltd.
Branches in the Principal Canadian Cities

1. Transports Food More Quickly—

BECAUSE of efficient, compact design, each Conveyor carries food sufficient to serve 30 to 60 patients in one trip. This feature alone saves many steps and cuts down the serving time to a considerable extent.

2. Quiet Service—

THERE is no noisy "clatter" when Conveyors are moving along corridors on their rubber wheels. Food trays require less handling than is usual with usual methods.

3. HOT Meals Kept Fresh and Palatable—

HOT meals speak for themselves. Ideal Conveyors keep food hot, delicious, and palatable for long periods of time. This most important feature practically eliminates cold food complaints.

4. At Lower Labor Costs—

BEING portable, Ideal Conveyors save many steps. This feature, plus large capacity, makes it possible to serve many patients quickly but with few attendants.

5. No Confusion—

SO SIMPLE, efficient and orderly is the routine of serving the Ideal Way, that the usual mealtime confusion is eliminated. Hundreds of patients can be served quietly, quickly—and well.

6. No Extra Kitchens—

BECAUSE of the portable feature, meals can be served anywhere the Ideal Conveyor is placed. Some hospitals utilize serving rooms—others simply wheel the Conveyor down the hall, serving as they go.

7. No Steam Tables—

FOOD retains its heat for long periods of time, in Ideal Conveyors. No steam tables are necessary. Many hospitals use Ideals for outside porch service.

8. Food Losses Reduced—

THE difference between a good meal and a poor one is often a matter of HEAT. Past experiences prove that less wastage is the result when appetizingly hot meals are served—the Ideal Way.

9. Flexibility

BECAUSE so many different designs are available, fleets of Ideal Conveyors can be used to solve most any hospital service problem. Many hospitals started with ONE Ideal to serve a far-away wing—and now use the entire system.

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